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# A N A T O M I A U T E R I H U M A N I G R A V I D I T A B U L I S I L L U S T R A T A,

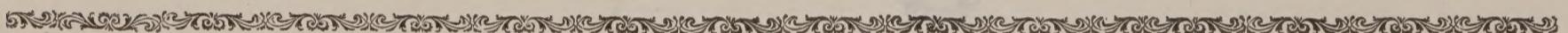
A U C T O R E

G U L I E L M O H U N T E R,

S E R E N I S S I M A E R E G I N A E C H A R L O T T A E M E D I C O E X T R A O R D I N A R I O ,  
I N A C A D E M I A R E G A L I A N A T O M I A E P R O F E S S O R E ,  
E T S O C I E T A T U M , R E G I A E E T A N T I Q U A R I A E , S O C I O .

B I R M I N G H A M I A E E X C U D E B A T J O A N N E S B A S K E R V I L L E , M D C C L X X I V .

L O N D I N I P R O S T A N T A P U D S . B A K E R , T . C A D E L L , D . W I L S O N , G . N I C O L , E T J . M U R R A Y .



T H E A N A T O M Y  
O F T H E  
H U M A N G R A V I D U T E R U S  
E X H I B I T E D I N F I G U R E S ,

B Y

W I L L I A M H U N T E R ,

P H Y S I C I A N E X T R A O R D I N A R Y T O T H E Q U E E N , P R O F E S S O R O F  
A N A T O M Y I N T H E R O Y A L A C A D E M Y , A N D F E L L O W O F T H E  
R O Y A L A N D A N T I Q U A R I A N S O C I E T I E S .

P R I N T E D A T B I R M I N G H A M B Y J O H N B A S K E R V I L L E , 1774.

S O L D I N L O N D O N B Y S . B A K E R A N D G . L E I G H , I N Y o r k - S t r e e t ; T . C A D E L L I N T H E S t r a n d ; D . W I L S O N A N D G . N I C O L ,  
O P P O S I T E Y o r k - B u i l d i n g s ; A N D J . M U R R A Y , I N F l e e t - S t r e e t .



MONDINI PRESENTA AL S. D'AKER IL GADDELL A MILANO CON IL MURALE



# T O      T H E      K I N G.

S I R,

THIS work had no other claim to the honour with which it is distinguished by YOUR MAJESTY, than as it illustrates one part of science hitherto imperfectly understood, and as it contains the foundation of another part of science, on which the lives and happiness of millions must depend. It gave me an heart-felt satisfaction, to observe how much this consideration recommended it to ROYAL PATRONAGE.

When respect, reverence, and gratitude rise to a certain degree, and the occasion is public and solemn, the freedom of language is restrained: and I should be guilty of an abuse of that gracious condescension, with which I am honoured, were I to attempt to express by words the sentiments of my heart. But, for the sake of those, who, placed at a distance from the ROYAL PRESENCE, may be more able to serve the public, than I have been, let me be permitted to say, that, although to acquire knowledge, and to communicate it to others, has been the pleasure, the busines, and the ambition of my life; yet, since I have had the honour to be a servant in YOUR ROYAL HOUSE, I have felt an additional incitement to assiduity, being convinced that an unremitting endeavour to be useful to society, is the readiest, and the most certain way to the favour of our SOVEREIGN.

That the peculiar blessing of this country, the influence of a KING who sincerely wishes to encourage every improvement, a KING who takes a part with all his subjects in their happiness, and in their distrefs, may be long preserved to us, is the fervent prayer of,

S I R,

Y O U R   M A J E S T Y ' S

most faithful Subject,

and most dutiful Servant,

WILLIAM HUNTER.



## PROOE M I U M.

QUOD omnes fere homines, in studiis scientiarum versati, diu multumque desiderarunt, linguam scilicet per universum terrarum orbem cognitam atque perceptam, id nobis ex parte aliqua suppeditat tabularum ænearum sculptura, ad veras rerum formas exhibendas adprime accommodata. Imo hujuscæ artificiæ ea est utilitas, ut in naturæ explicatione sæpen numero plus valeat quam quævis verborum copia, aut vis dicendi. Quocunque enim oculo fideli inde subjicitur (spectet modo aliquis argumenti haud ignarus) animo confessim arripitur, memoriæque alte impressum haud prouersus excidit. Lentior sermonis mora, et vis hebetior.

Proinde ex quo tempore hoc artificium usibus hominum communiter inserviit, via brevior faciliorque patefacta est ad inventa quælibet tum divulganda, tum conservanda; et rerum simul naturalium cognitionis, ab exiguis profecta initis, paulatim eo usque increvit, ut feculi hujuscæ, omnium ornatissimi, sumnum fere ornamentum jam tandem extiterit.

Cæterarum artium incrementa, æquis saltem passibus, comitata est anatoma. Etenim non pauci recentiorum, viri excellentis ingenii atque judicii, labore plurimo, nec minori solertia, corporis humani tum fabricam tum œconomiam pervestigant. Ex his plurimi artem hanc graphicam ancillantem sibi adhibuerunt; præcipuisque inde repertis suis feliciter illustratis, effecerunt, ut ars anatomica, hominum generi, si qua alia, utilis et fructuosa, intellectu simul facilior fieret, simul cultu jucundior.

Restabat tamen pars una humani corporis, eaque sive structuræ sive per elegantis, sive muneris officiique ratione, primas tenens, a disciplinæ hujus professoribus non satis explorata. Restabat scilicet uterus humanus. Absit vero, ut viris hisce egregiis vitio detur, quod rem quasi neglegtam habuerint, cujus penitus perspiciendæ copia rara erat et infrequens. Paucissimis enim contigerit necesse est, ut tot cadavera fecuerint, quot ad conditionem uteri gravidi, variis temporibus variam, per vestigandam, nedum demonstrandam, sufficerent. De aliis itaque silendum, ubi laudare nefas. Quod ad auctorem attinet, anno ille primum MDCCLI. felici usus est occasione id in humano corpore explorandi, quod in brutis jam olim quæsiverat. Mulier quædam, graviditas sive mensibus prope exactis, repentinam obierat mortem. Cadaver, adhuc integrum, cultro subiectum est. Operi favit tempestas. Cera, vasis rite injecta, voto respondit. Repertus est pictor, vir ille in suo genere adprime solens. Partes singulæ, multis coram adstantibus, exploratae sunt atque excusæ, ut omnis rei veritas firma satis auctoritate comprobari posset atque stabiliri.

Sub his auspiciis, aliquot mensium spatio decurso, decem primæ tabulæ perfectæ delineatae fuerant; partes ipsæ identidem publice expositæ; et ea quæ de singulis animadversa fuerant ac notata, palam dicta. Auctoris inde animum subiit, se rem disciplinæ hujuscæ fautoribus haud ingratam facturum, si historiam uteri gravidi anatomiam ederet, his decem tabulis illuminatam. Consilium placuit. Opus in manus artificum, maxima laude florentium, traditum est; et pecunia collatitia a plurimis pro more repræsentata.

Alterum interea cadaver in manus incidit, quod quidem, cœli licet tempestas minus jam anatomia amica esset, haud nullo in pretio habendum fuit; quandoquidem huic acceptæ referuntur figuræ aliquot, ab hoc instituto haud alienæ, dignæque adeo visæ, quæ operi, supplementi loco, adjicerentur. Dum autem super his operam navabat sculptor, en tertium cadaver, quam opportune! Etenim illud non modo quædam, prius obscura, luci dedit, sed novis etiam figuris adorandis materiam aptissimam subministravit.

Cum auctor huic se accingebat negotio, animo destinavit decem tabulas, modo dictas, in lucem proferre, jaçtum quasi aliquod fundamen, cui alia plura, de hac parte anatomia, postea adjicere ac superstruere sperabat, si quando per otium ipsi liceret hanc rem altius investigare.

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*THE art of engraving supplies us, upon many occasions, with what has been the great desideratum of the lovers of science, an universal language. Nay, it conveys clearer ideas of most natural objects, than words can express; makes stronger impressions upon the mind; and to every person conversant with the subject, gives an immediate comprehension of what it represents.*

*From the time when this art came more generally into use, it has been much more easy both to communicate and to preserve discoveries and improvements; and natural knowledge has been gradually rising, till it is at length become the distinguishing characteristic of the most enlightened age of the world.*

*Anatomy has, at least, kept pace in improvement with the other branches of natural knowledge. Many of the moderns, through much labour and patience, as well as ingenuity and judgment, have thrown considerable lights upon the structure and operations of the human body; and they have particularly by engravings, made the study of that art, in which humanity is so much interested, both more easy and pleasant. Most of the principal parts of anatomy have, in this manner, been successfully illustrated.*

*One part however, and that the most curious, and certainly not the least important of all, the pregnant womb, had not been treated by anatomists with proportionable success. Let it not, however, be objected to them, that they neglected what in fact it was rarely in their power to cultivate. Few, or none of the anatomists, had met with a sufficient number of subjects, either for investigating, or for demonstrating the principal circumstances of uterine gestation in the human species. But let what cannot be praised, in others, be passed over in silence. With respect to the present undertaking, in the year 1751 the author met with the first favourable opportunity of examining, in the human species, what before he had been studying in brutes. A woman died suddenly, when very near the end of her pregnancy; the body was procured before any sensible putrefaction had begun; the season of the year was favourable to dissection; the injection of the blood-vessels proved successful; a very able painter, in this way, was found; every part was examined in the most public manner, and the truth was thereby well authenticated.*

*In the course of some months, the drawings of the first ten plates were finished, and from time to time the subject was publicly exhibited, with such remarks as had occurred in the examination of the several parts. Many lovers of this study approved of the author's proposal to publish the anatomy of the gravid uterus, illustrated by those ten plates: the work was immediately put into the hands of our best artists; and subscriptions were received.*

*In the mean time a second subject was procured; which, though the weather happened to be very unfavourable, afforded a few supplemental figures, of importance enough to be taken into the work. And before the engravings were finished, a third subject occurred very opportunely, which cleared up some difficulties, and furnished some useful additional figures.*

*The original plan having been only to publish the first ten plates, as a ground-work for farther improvements in this branch of anatomy, to be added whenever good opportunities should be offered, the author now began to entertain hopes of being able to give a much more compleat work. He foresaw that*

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vestigare. Jam vero majora quædam animo complecti, et etiam spem fovere ausus est, fore ut opus aliquod exædificare posset, quod ad perfectionem absolutionemque propius perveniret. Prævidit enim, in hac urbe, tanta hominum multitudine referta, annorum aliquot spatio, occasionem omnia ea quæ ad gravidum uterum pertinent, obser-vandi viro, hoc agenti, haud fortasse defuturam; unde fibi facultas dari posset aliquod quasi sistema condere, variasque illas mutationes, singulis graviditatis mensibus proprias, figuris exprimere. Ejusmodi fere est hoc opus; quod, longo tempore promissum, tandem aliquando in medium prodit. Ut id fane ad exitum perduci posset, moras tra-here necesse fuit, præter opinionem diurnas. Quoties autem auctor secum reputat has moras operi minime infruerias fuisse, abunde fentit, quo se consoletur.

Quod autem hoc argumentum illustrandi uni alicui mortali tam pulchra occasio toties obtigerit, in causa fuerunt tum varii casus, tum amicorum multorum gratissima subfida. Tabularum harum ultima e manu artificis vix exceperat, cum datum fuit delineare embryonem mole minorem, quam quem antea vidisse auctori unquam contigerat; et haud ita pridem *conceptus* in tuba fallopiana, res hæc animadversione egregie digna, figurarum numerum adauxit. Hæ figuræ, et si qua alia, ejusdem argumenti, occurrent, vel in tabula his adjicienda, vel cum uteri gravi descriptione anatomica, quam auctor secum meditatur, data occasione, in publicum aliquando proferentur. Hactenus quidem ipsi id otii non concessum est, quod ad hanc operis partem absolvendam esset satis. Quod si casu aliquo improviso impeditus fuerit, quo minus id, quod cupiat, possit exequi, perfusum fibi habet, haud defuturum aliquem, huic muneri obeundo parem. Multi enim sunt, qui auctorem de his rebus publice differentem fæpe sæpius audierint; multi quos ille opinionis ac sententiæ fuae participes fecerit.

**FIGURARUM** fere anatomicarum duplex est et diversa ratio. Ab altera simplex rei imago, qualis oculo visa est, talis delineatur. Altera, una cum visis, etiam excogitata exhibet; nec tam ad oculum artificis, quam ad ingenium memoriamque accommodatur. Prioris generis exempla apud *Bidloo* extant; posterioris apud *Eustachium*.

Fieri non potest, quin figura ista, quæ fit ex fideli naturæ imitatione, et ex rei unius contemplatione enascitur, in quibusdam fæpe partibus indistincta aut minus perfecta esse videatur. Altera autem, ex ingenio nata, quæ autem non fit, nisi per laborem, et observationem et experientiam multiplicem, id uno intuitu videndum exhibet, quod fortasse non nisi ex rerum varietate colligendum fuerat. Porro hæc est ea, quæ et meliorem ordinem, et compendium facilius, et majorem perspicacitatem admittit. Alteram quidem contemplans oculus, elegancia ac concinnitate naturæ oblectatur: in altera, geometrici cuiusdam diagrammati, accurati quidem exactique, sed nudi, sed inornati similitudinem agnoscit. Illa rem quamlibet spectatori, tanquam præsentem, subjicit, et dat *percipere*: haec tantummodo describentis vice fungitur, remque delineatam in animi conspectu ponit. Prior autem posteriori in hoc præstat maxime, quod ea, quæ revera visa sunt, exhibens, speciem quandam veritatis præ se fert; et fit propemodum æque neficia fallere, ac illud ipsum quod assimulatur.

De hoc opere, quod naturæ ipsius speciem proponit, alii fortasse aliud judicium ferent. Nisi enim auctorem fallat vana spes sua atque opinio, multi sunt apud quos ille nec censetur operam inutilem posuisse, nec inepte erogasse pecuniam; apud quos scilicet figurarum magnitudo, elegancia, ac varietas aliqua in laude ponentur. Contra, non deerunt, quibus magna pars sumptus supervacanea omnino atque infruerias fuisse videbitur. Contendent scilicet operis hujus utilitatem ad plures potuisse pertingere, si figuræ omnes in formam arctiorem contractæ fuissent; si sculptura manu minus delicata fuisset elaborata; si aliquot etiam figuræ, utpote aliis non absimiles, omnino omisstæ.

Cum autem figuræ, de quibus agitur, ea mente atque consilio fingi soleant, ut ab iis, quantum fieri potest, explicetur tam vera natura partium (nempe earum habitudo et structura) quam forma externa, positura, ac nexus; magnitudo illis aliqua concedatur ne-cessa est; aliter enim partes, ut aiunt, componentes haud satis distincte delineari possunt. Quod si magnitudo rei propria sculpturæ quodammodo apta fit ac conveniens, ea ipsa, utpote quæ observatu dignissima est, haud dubio eligenda est præcipue. His de causis figuræ omnes, quotquot hic proferuntur, ad justum naturæ modum perfectæ sunt, paucis tantum exceptis, quæ in formam naturali angustiorem coguntur,

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that, in the course of some years, by diligence he might procure in this great city, so many opportunities of studying the gravid uterus, as to be enabled to make up a tolerable system; and to exhibit, by figures, all the principal changes that happen in the nine months of utero-gestation. Such is the work which, at length, is offered to the public. The execution of it has indeed taken up more time, than what was at first expected: but it gives the author no small satisfaction to reflect, that the delay of publication has contributed not a little to the value of the work.

That one person should have had so many opportunities of illustrating this subject, has been owing to fortunate circumstances, as well as to the assistance of many friends. Even since the last plate was finished, he had an opportunity of making a drawing of a younger embryo than he had before seen; and he has likewise made some figures from a very curious case, which he lately met with, namely a conception in the fallopian tube. These, and whatever may hereafter occur, he will offer to the public upon some future occasion; probably in the way of a supplemental plate, or with the anatomical description of the gravid uterus, which he proposes to publish at full length. He has not hitherto had leisure to finish that part of the work. But if he should be prevented from doing it, by any unforeseen accident, it will be in the power of many gentlemen of the profession to do it for him, as he has constantly explained his observations on this subject in his public lectures.

**ANATOMICAL** figures are made in two very different ways; one is the simple portrait, in which the object is represented exactly as it was seen; the other is a representation of the object under such circumstances as were not actually seen, but conceived in the imagination. *Bidloo* has given us specimens of the first kind; *Eustachius* of the latter.

That figure which is a close representation of nature, and which is finished from a view of one subject, will often be, unavoidably, somewhat indistinct or defective in some parts: the other, being a figure of fancy, made up perhaps from a variety of studies after NATURE, may exhibit in one view, what could only be seen in several objects; and it admits of a better arrangement, of abridgement, and of greater precision. The one may have the elegance and harmony of the natural object; the other has commonly the hardness of a geometrical diagram: the one shews the object, or gives perception; the other only describes, or gives an idea of it. A very essential advantage of the first is, that as it represents what was actually seen, it carries the mark of truth, and becomes almost as infallible as the object itself.

With regard to this work, which is a faithful representation of what was actually seen, the judgement of the public will probably be divided. Many will approve of the labour and expence which have been bestowed upon it, and commend the largeness, elegance, and variety of the figures. Others will think that a great part of the expence might have been spared, and the work thereby rendered of more general use, if the figures had been made to a smaller scale, if the engraving had been less finished, and if some of the figures, which are very similar to others, had been omitted.

Anatomical figures being intended to shew, as much as possible, the true nature, that is, the peculiar habit and composition of parts, as well as the outward form, situation and connection of them, should certainly be large; otherwise the smaller component parts can not be distinctly represented; and if the natural size of the object be tolerably fit for an engraving, that must be of all others the very best, as it has the advantage of shewing such an important circumstance. Upon these considerations, all the figures in this work were made of the natural size, except a few which were reduced in size, and one or two of minute objects which, on that account, were magnified.

For

## PRO O E M I U M.

coguntur, nec non una atque altera ex rebus minutissimis, quas auctor idcirco ampliandas curavit.

Iisdem etiam de causis constat hujuscemodi figuris deberi accuratitudinem quandam atque elegantiam. Profecto in pictura sœpe fit, ut oculi levissima adumbratione oblectentur; maxime ubi vel ipsum tabulae argumentum adeo pervulgatum est, ut vis imaginandi facile excitetur, id, quocunque defuerit, statim adimpleteura (sicuti iis in tabulis, ubi hominum effigies, aut alia res, pariter notæ, exhibentur) vel ubi partes rerum minutiores aciem pene oculorum fugiunt, ut ea in tabula chorographica, quæ, propter distantiam suam, parum cernuntur. Sed in anatomia, ut et in rei naturalis historia, argumentum tabulae spectatori vel omnino esse incognitum ponitur, vel non satis exploratum; partesque minimæ, pariter cum majoribus, studium diligentiamque requirunt. Operam quidem dare, ut summa arte elaborentur eæ figurarum partes, per quas nihil, aut parum exprimitur, nisi quod prius sit expressum, hominis effet vehementer et opera sua et pecunia abutentis. Harum igitur figurarum pars maxima ultra mediocritatem perfecta est; aliquot summa expolitione atque artificio ornata; leviora, vel ea quæ prius fuerant aliqua ex parte illustrata, leviter tacta; ea vero quæ secunda vice proferuntur, lineis fere exterioribus adumbrata.

Cuilibet homini, cui judicium sit paulo severius, in proclivi crit id auctori vitio dare, quod opus hoc haud satis justo ordine processerit, nec formam pressam satis atque concinnam induat. Quod si ille difficultates, quotquot auctorem circumvenerint, contemplatione fuerit complexus, conamina hæcce, qualiacunque sint, animo magis æquo recipiet. In plurimis alis operibus, ad rem anatomicam quæ spectant, veniam fibi haud facile impetrat vel defectus aliqua ex parte, vel materies confuse permisitque disposita. Quivis enim, si modo laborem pati decreverit, primum quidem exercitatione et experientia intimam argumenti sui cognitionem adipisci poterit; deinde autem operis cuiusdam, perfecti undique omnibusque numeris absoluti, formam atque imaginem animo effingere; et denique ex variorum cada verum contemplatione rem institutam pro arbitrio suo ad exitum perducere.

Humani autem corporis uterum gravidum otiose secare paucis datum est. Pauci sunt, quibus, in omni vita spatio, nisi semel, aut etiam fortassis iterum hoc fuerit indulsum. Ponamus quidem talem occasionem, faustum omnino atque felicem, cultori cuiquam anatomiae esse oblatam; necesse est ut continuo et sine mora de ratione ille instituti fixum certumque destinet; et uno eodemque tempore duo consilia, inter se non bene convenientia, prosequatur. Primum enim, ut ipse rem penitus perspectam habeat, cadaver sua manu fecet necesse est; ita tamen instituenda est investigatio, ut artifici simul adstanti, præcipuas partes commode delineandi plena sit copia. Proinde vix fieri potest, quin consilium, optime suscepit, immutari oporteat, variisque rebus accommodari quæ de improviso et præter expectationem possint occurere. Ut autem id rite perfici possit, opus est longi temporis mora; partes interea aëri externo, inter pingendum, exposite plurimum detrimenti capient; præcipue si vir talis negotio obeundo præsit cui curæ est, ne ficti quidpiam, aut ex memoria de prompti, ipsi rei veritati inducatur, et ut nihil ibi locum habeat, nisi quod ex naturæ ipsius observatione, re alia nulla intercedente, arreptum fuerit.

Si auctor tot opportunitates, hanc ornandi provinciam, fibi prospexit futuras, quot ipsi bona sua fortuna indulserit, figuras ille quidem aliquas emendationes reddere potuisset; alias aliis melius accommodare, et ita earum seriem in minorem numerum cogere. Figuras quidem nonnullas, jam delineatas, duasque tabulas, a sculptore prorsus perfectas, apud se prudens detinuit; ne operis scilicet moles atque impensum plus æquo increaserent. Et profecto plures, eadem ratione inductus, detinuisse, nisi ipsi mentem subiisset, longum fortasse fore tempus, priusquam aliquod figurarum systema, hoc suo minus imperfectum, in lucem sit exiturum. Potius igitur duxit culpæ in periculum incurgere, eo quod rem nimis copiose, quam quod parcus ac negligenter tractaverit.

Operi, nimiæ jam magnitudinis, nimiique sumptus, internam fœtus anatomicam adjicere, supervacaneum fore visum est; præfertim cum alii isto munere sunt functi; et cuilibet, id qui de integro meditatur, hæc omnia cognoscendi atque tractandi haud facile defutura est occasio.

In

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For the reason already given it should seem obvious that anatomical figures ought to be likewise well finished. In many subjects of painting, indeed, the slight manner of producing an effect, without labour, is very agreeable; particularly when, either the subject is so well known, that a mere hint is enough to the imagination, which easily supplies all that is wanting; as, in designs where human figures, and other well known objects are introduced; or, when the smaller parts of objects are not to be seen distinctly, as the objects, especially the more distant ones, in a landscape. But in anatomy, as in natural history, the subject is supposed to be new, or only imperfectly known; and the smaller parts are to be studied with care, as well as the larger masses. In those parts of anatomical figures, indeed, which are mere repetitions, or nearly so, the labour and expence of finishing may well be saved. Accordingly in this work the greater part is tolerably well finished, some very highly and delicately; matters of less moment, or approaching to repetitions are executed in a slight manner; and what is merely a repetition, is commonly put down in bare out-lines.

Any judicious person, who examines this work with care, will naturally think that the plan might have been more regular and more compact: but it is presumed that he will be less dissatisfied with the authors best endeavours when he shall consider the difficulties which lie in the way, and render the subject almost unmanageable. In many other works of anatomy, imperfections, and particularly a want of method, are not readily excused. For, if the author will but take the pains, he may first of all make himself master of his subject by repeated dissections and experiments; he may, at his leisure, lay down a studied plan for a compleat and regular work; and with his own convenience he may execute his plan from a variety of dead bodies.

But, opportunities of dissecting the human pregnant uterus at leisure, very rarely occur. Indeed, to most anatomists, if they have happened at all, it has been but once or twice in their whole lives. Upon such occasions therefore, even when attended with the most favourable circumstances, the anatomist must fix upon a plan, without loss of time, and at once carry on two schemes which are hardly compatible; that is to say, he must dissect for his own information, in the first place, and yet conduct the inquiry so as to have good drawings made of the principal appearances: and it is more than probable that he must alter any plan that he might have proposed, and adapt it to a variety of circumstances in the subject that could not be foreseen; and much time must be lost, and the parts must be considerably injured by long exposure to the air before the painter; especially if the work be conducted by an anatomist who will not allow the artist to paint from memory or imagination, but only from immediate observation.

If the author could have foreseen the numerous opportunities which have fallen to his share, he might have easily improved some of the figures; and by adapting them better to one another he might have compleated the series in a smaller number. He has actually kept back several drawings which had been made, and two plates which had been engraved, that the work might not be overcharged; and would have withheld more, for that reason, if he had not thought that it would probably be long before a more perfect system of figures would be offered to the public. This consideration induced him to risk the being censured rather for having done too much, than too little.

In a work which was already become too large and expensive, it was thought proper to omit the internal anatomy of the child, especially as that part has been executed by others, and opportunities of studying it may be easily procured.

The

P R O O E M I U M.

In artem typographicam sumptus, major solito factus est, non quidem folam ob elegantiam, qua opera celeberrimi artificis *Joannis Baskerville* ornantur omnia; sed præcipue chartæ, qua ille utitur, atra-mentique ratione habita. Talis est enim chartæ hujuscæ lævor, atra-mentumque tam cito arescit, ut folia, literis licet plenissima, tabulæ cu-jusque interpositæ nitorem integrum atque illæsum conservatura sint.

Ad summam, si auctori ea laus fuerit concessa, quod, in hac pri-maria parte humani corporis illustranda, neque operæ suæ, neque impensarum, neque temporis rationem habuerit, voti fane fit compos, nec aliud gratiæ fibi apponi postulat. Harum autem laudum in par-tem plurimum merito suo evocandus est frater auctoris solertissimus *Joannes Hunter*; nam in plurimis cadaveribus secandis partem ille la-borum sustinuit: cuius quidem viri acumen et diligentia in hujuscæ-modi peruestigationibus adeo omnium sermone celebrantur, ut de illo si fileretur adjutore, operis ipsius pretio atque existimationi pa-rum effet consultum. Artificibus etiam singulis, quorum ingenii at-que industriae monumenta hic extant, gratias agit quas habet maxi-mas; præ cæteris autem viro optimo ac peritissimo artifici *Roberto Strange*, non modo quod is manu sua tabularum harum duas tanquam æternitati consecrari, sed etiam quod, ab incepto operis usque ad exitum, auctorem amicitia stabili atque incorrupta dignatus, vel con-filium vel auxilium expetenti haud unquam defuerit.

P R E F A C E.

*The additional expense of Mr. Baskerville's art was not incurred for the sake of elegance alone; but principally for the advantage of his paper and ink, which render a leaf of his *Pres-Work* an excellent preservative of the plates between which it is placed.*

*If it be allowed that the author has spared neither labour, nor time, nor expence in improving an important part of anatomy, this is all the merit which he can claim. In most of the dissections he was assisted by his brother Mr. John Hunter, whose accuracy in anatomical researches is so well known, that to omit this opportunity of thanking him for that assistance, would be in some measure to disregard the future reputation of the work itself. He owes likewise much to the ingenious artists who made the drawings and engravings; and particularly to Mr. Strange, not only for having by his hand secured a sort of immortality to two of the plates, but for having given his advice and assistance in every part with a steady and disinterested friendship.*





*L. V. Rymondi delin.* *F. S. Raveni sculp.*  
TAB. I. *Quem priores tubulari Mulierem exhibent, non sibi gravitatis chionae accunte subita morte extinctam, et terrena venis arra diversi coloris  
infecta distincte erant. In hac prima contenta. Abdominis, integumentis decupsum incisis et reflectis, sub aspectum venient. hisupinatum et illa, ut  
clari sit, evadaver, ut superior. Truncus pars haud paucis operis extiterit, et visceris inde abdominalia clavis contemplanda obicerentur.*

*Publ. Nov. 1774, by D. Hunter.*

## T A B U L A I.

DECIM priores tabulae mulierem exhibent, nono sere graviditatis mense excunte, ann. 1750, subita morte extinctam. Arteria a venis, cera diversi coloris injecta, distinctae erant. In hac prima, contenta abdominis, integumentis decussatum incisis et reflexis, sub conspectum veniunt. Resupinatum est acclivi situ cadaver, ut superior trunci pars haud paulo esset elatior, et visceris inde abdominis clarius contemplanda objicerentur.

Femora et pudenda, utpote partes externae, eam, quam cæteræ, notationem non desiderant. Pudenda vero, in hoc cadavere, ut ex figura concipi potest, aqua inter cutim intumuerunt.

*AA* Pars anterior thoracis infra mammas, qua trunca erat transverse discissus, figuram a parte superiori terminans.

*BB* Integumentis, musculis, et peritoneo decussatum incisis, corum anguli duo superiores in marginem thoracis cartilaginosum reflexi.

*CC* Eorundem anguli duo inferiores, in inguen, femur, et ossis ilium spinam anteriorem, utrinque reclinati. In angulis illis, ad marginem inferiorem medio femori oppositum, observare licet partem rugosam et tensam, qua filum adhibitum fuit, ea mente, ut, angulo detraicto, uterus et partes vicinæ manifestius apparent.

*D* Incisionis longitudinalis, ad scrobiculum cordis a mucrone cartilagine ensiformis ductæ, extremitas superior.

*E* Ejusdem incisionis, ad symphysis ossium pubis, extremitas inferior.

*F* Hepatis ligamentum falciforme, super faciem internam musculorum abdominis, ad illius visceris fissuram, magnum inter lobum et parvum, protensum.

*GG* Arteria et vena epigastrica, in utrisque musculorum angulis inferioribus trans peritoneum sese projicientes.

*H* Hepatis lobus sinistus, in parte summa regionis epigastricæ situs. Illius in superficie, arteriæ quædam parvæ, ex substantia illius glandulosa excentes, et in peritoneum quo vescitur diffusæ, declinantur.

*I* Omentum in regione epigastrica situm, intestinis tenuibus incumbens. Vasa quamvis cera vividi coloris impleta, ob partis adipem cerni vix potuerunt.

*K* Omenti pars inferior et media, ab utero ante elevata, quæ in plicaturas multas quam minimas contrafacta jacuit et compressa.

*L* Omentum a latere dextro, post partem cam uteri, qua incipit tuba dextra, descendens.

*M* Omentum quod in latere sinistro ante tubam fallopiam, &c. descendenter, seorsum positum, quo partes eæ in conspectum pro dirent.

*NN* Duo intestinorum tenuium gyri, quorum utrique, maxime autem inferior, omenti parte prædicta tecti fuerant.

*O* Uterus, regionem totam umbilicalem et hypogastricam possidens. Superficies ejus vasorum ramulis tenuibus intertexta: horum pleraque venæ. Multa sanguine solummodo impleta, cadavere diutius asservato, paulatim evanuerunt. Situs uteri paulo obliquus, et ad latus dextrum. Umbilicus parte qua stat hæc litera aliquanto altior fuit. Forma uteri quodammodo irregularis; alia ejus partes aliis eminentiores. Id ex eo oritur, partim quod visceribus vicinis incumbens, præfertim ad fundum, se ad eorum formam fixerat; partim etiam quod contenta ejus formam irregularēm præ se tulerant.

*P* Tumor ad latus sinistrum uteri, in ea scilicet parte cui media placenta interne adhærescebat.

*Q* Uteri tumor in latere dextro, ubi fœtus nates jacebant, ubi etiam fœtum per substantiam ejus satis distincte tactu sentire licuit. Undique circum hanc partem uterus aliquanto depresso, et facili instar aqua repleti, tactum afficiebat.

*RR* Ligamenta rotunda. Sinistrum, propter uteri situm obliquum, dextro longius. Exitus amborum, angulis inferioribus integumentorum &c. filo deducitis, in conspectum veniebat. Quæ stricture ibi videtur, nihil aliud est, quam peritonei in forma thecæ duplicitatio et protrusio, ea ligamenta per paululum spatiis sequens, quæque ab eo peritonei processu, funem spermaticum canis vel tauri comitante, gradu tantum differt.

*SS* Tubæ fallopiæ. In latere dextro, solum fere tubæ principium cernere licet, parte reliqua post uterum descendente. In latere sinistro, tubæ media pars sola in conspectum venit; tegitur enim ejus principium intestino ibi positio; finemque ejus, vel fimbriæ, vasa spermatica occultant. Ea vasa, in latere sinistro, satis aperte conspicuntur; spatium illud totum inter ligamentum rotundum et tubam occupant: vas parvum arteria; magnum ei adhærens vena. Utraque ad uteri latus, in peritonei duplicatione illa, quæ ligamentum latum appellatur, procedunt.

## P L A T E I.

THE first ten plates were made from the dissection of a woman, who died suddenly, in the end of her ninth month of pregnancy, in the year 1750. The arteries and the veins were injected with wax of different colours.

This plate represents the object, as it appeared when the abdomen was opened by a crucial incision, and the four angles of the containing parts turned outwards; the subject lying on its back, but so that the upper part of the trunk was considerably higher than the rest.

The thighs and pudenda require no explanation: the latter of these were edematous in the subject, as they appear in this figure.

*AA* The forepart of the chest, just below the breasts, where the trunk was cut through, and which therefore terminates the figure above.

*BB* The two upper angles of the integuments, muscles, and peritoneum, turned back over the cartilaginous margin of the chest.

*CC* The two inferior angles, turned down over the groin, thigh, and anterior spine of the os ilium, on each side. In each of these, at its lower edge and opposite to the middle of the thigh, a part may be observed to be stretched and puckered, where a thread was fixed, which pulled the flap down, in order more fully to expose the womb and adjacent parts.

*D* The upper end of the longitudinal incision, at the pit of the stomach, beginning just at the point of the ensiform cartilage.

*E* The lower end of the same incision carried down to the symphysis of the ossa pubis.

*F* The umbilical or falciform ligament of the liver, which runs upwards, on the inside of the abdominal muscles, to the fissure between the great and the small lobe of that viscus.

*GG* The epigastric artery and vein, projecting through the peritoneum, upon each of the lower angles of the muscles.

*H* The small lobe of the liver, situated in the highest part of the epigastric region. Upon its surface are represented some small arteries, which emerge from the glandular substance, and are diffused in the peritoneum that covers it.

*I* The omentum, spread over the small intestines in the epigastric region. The vessels of this part, tho' injected, were hardly visible, being obscured by fat.

*K* The lower and middle part of the omentum, which had been pushed up by the womb, and lay in numerous small folds pressed together.

*L* The omentum, in the right side, passing a little way down behind that part of the womb from which the right tube begins.

*M* The omentum, in the left side, which came down before the fallopian tube, &c. and which was thrown a little aside, that those parts might be seen.

*NN* Two turns of the small intestines; both of which, but especially the lower, were covered by the above-mentioned part of the omentum.

*O* The womb, possessing all the umbilical and hypogastric regions. Its surface is interpersed with a number of small vessels, the greatest part of which are veins. They were filled with blood only, and therefore gradually disappeared after the subject had been preserved some time. Its situation is a little oblique, and towards the right side. The navel was a little higher than the part upon which this letter is placed. The form of the womb is a little irregular, at some places projecting more than at others. This seemed partly owing to its being moulded upon the neighbouring bowels, particularly at its fundus; and partly to its contents; whence,

*P* A swelling towards the left side of the womb, where the middle of the placenta adhered; and

*Q* A swelling on the right side of the womb, where the buttocks of the child lay; and where the child could be felt, pretty distinctly, through its substance. All around this part the womb was somewhat depressed, and felt like a bag of water.

*RR* The round ligaments. The left is longer than the right, because of the oblique situation of the womb. The exit of each was brought to view by drawing down the lower angles of the integuments, &c. with threads: and the appearance of a stricture there, was occasioned by a sheath-like doubling and protrusion of the peritoneum attending those ligaments some little way; which differed only in degree from that process of the peritoneum, which accompanies the spermatic rope in a dog, or bull.

*SS* The fallopian tubes. In the right side, little more than the beginning of the tube is seen, the rest running down behind the womb. Of the left tube the middle part only is exposed; its beginning at the womb being concealed by the gut which lies upon that part, and the end or fimbriæ being covered by the spermatic vessels. Those vessels are pretty distinctly seen in the left side: they fill up all the space between the round ligament and the tube: the small vessel is the artery, and the great, to which that clings, is the vein: both of them are passing up to the side of the womb, in that doubling of the peritoneum called, the broad ligament.

## T A B U L A II.

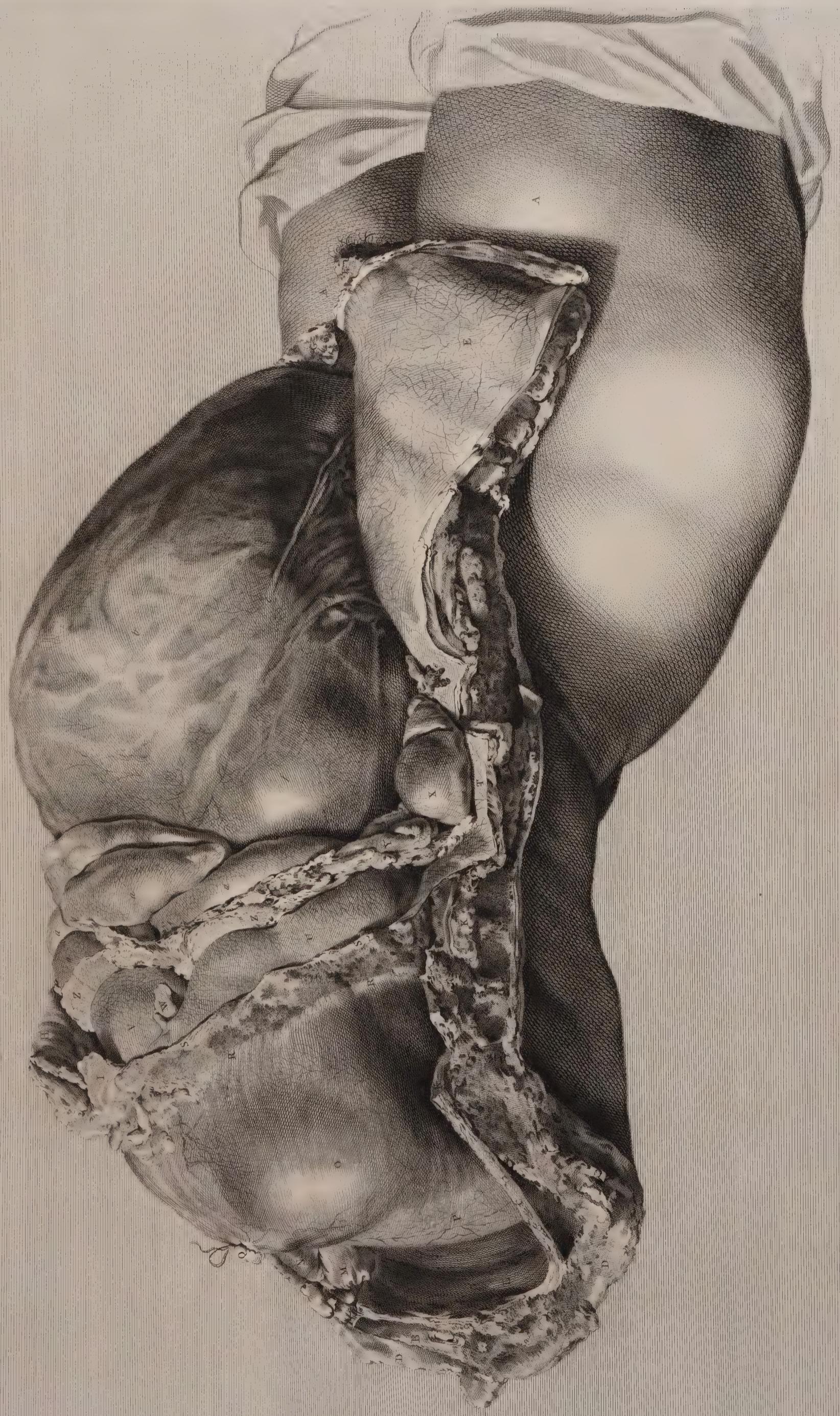
CONSPECTUS viscerum abdominis a latere dextro, partibus continentibus thoracis et hypochondrii, ac maxima omenti parte sublatis.

- A A Femora, ubi transverse scissa, linteo cooperta.
- B Spina, supra diaphragma, transverse difficissa.
- C Costæ octavæ pars.
- DD Integumenta et musculi, ad partem thoracis posteriorem, eo loco quo negligenter sejunctus erat truncus, rescissi.
- E Musculorum abdominis angulus inferior, in femur, ut in praecedente figura, devolutus.
- F Montis, ut dicitur, veneris pars, una cum musculis abdominis, devoluta.
- G Ad finistrum latus pars huic respondens.
- H Thoracis margo, ad latus scrobiculi cordis finistrum, peritoneo et musculis inversis, tectus.
- I Cartilago mucronata.
- KK Costæ inferiores, partesque cæteræ continentia sectione longitudinali sejunctæ, adeo ut, iis quæ sectionem et scrobiculum cordis interjacerent remotis, viscera hypochondrii dextri sese videntia offerant.
- L Pars ima atque posterior cavi dextri thoracis.
- M Aorta descendens, eo loco, quo cadaver transverse diffissum fuerat, deligata; nec non, colorata cera impleta.
- N Oesophagus ibidem deligatus.
- O Superficies superior convexa diaphragmatis; quod, pleura tectum, in situ suo naturali manet.
- P Diaphragmatis centri tendinei pars quæ in dextro latere sita est.
- Q Venæ cavæ inferioris truncus, juxta diaphragmatis superficiem superiorem deligatus.
- RR Pleuræ sejctæ margo, loco quo reflexa de superficie superiori diaphragmatis, faciem internam costarum congebat.
- SS Peritonei sejcti margo, loco quo scilicet a superficie diaphragmatis inferiori, membranæ investientis more, ad faciem internam musculorum abdominis cursum tenebat.
- Superficies inter margines pleuræ (RR) et peritonei (SS) connexio est diaphragmatis ex facie interna costarum disrupta.
- T Facies interna musculi transversi peritoneo tecta.
- U Hepatis lobus magnus, vel dexter; in cuius crepidine, ex adverso literæ U, exiguum videre est fossulam, quam vesicula tellis figuræ fuæ aptaverat, faciei internæ hepatis hic loci apposita.
- V Hepatis lobus parvus, in hypochondrium finistrum sese extendens.
- W Ligamentum hepatis falciforme, seu venæ umbilicalis reliquæ, loco quo fissuram hepatis intrat, recisum.
- X Colon ex cæco ad hepar sursum transiens.
- YY Colon, cum appendiculis suis adiposæ, finistrorum currens, hepar inter et intestina tenuia.
- ZZ Omenti principium vel radix, quod ex intervallo hepatis et intestinorum tenuium nascitur.
- aaaaa Illorum intestinorum tenuium gyri aliqui, omento paulo infra marginem hepatis excisso, in conspectum veniunt.
- b Uterus. In facie ejus externa, venas, aliquantulum obscurius, notare licet. Hæc, cum cadaver primum apertum posui, cera etiæ implete, colore tantum distinguebantur. Tempore autem quo tabula hæc erat delineata, venæ, parte jam arefacta, sese magis projiciebant, ut in figura quodammodo se videndas offerunt.
- c Ligamentum rotundum in inguen descendens.
- d Tuba fallopiana, juxta faciem internam ossis ilium retrosum currens.
- e Tubæ extremitas fimbriata, pone latus uteri jacens, hic paulum educta, nempe ut conspiciantur. Ligamentum rotundum inter et tubam, vasa spermatica, præfertim vena, conspicuntur, ad partem uteri anteriorem, cui placenta adhaeret, præcipue tendentia.
- f Uteri angulus prominens, loco quo foetus nates, utero nondum adaptato, tactu sentire licebat.
- N. B. Costis notis lateris dextri remotis, illæ quæ ad latus erant finistrum, ex vi resiliendi, marginem thoracis (H) et exinde cartilagineum ensiformem elevarunt; unde facies ejus anterior in dextrum latus oblique tendebat.
- Figura hac nondum delineata uterum observavi sensim subfuisse; quapropter ope quam minimæ cannulæ, uterum, spirito vino injiciendo, in pristinam figuram restituere conatus sum.

## P L A T E II.

A View of the same object from the right side, after the upper abdominal flap, and the containing parts of the right hypochondrium had been removed, that the whole mass of the abdominal viscera might appear in its natural situation, the subject lying on its back.

- A A The thighs, covered with a cloth where they had been cut through.
- B The back-bone cut through above the diaphragm.
- C Part of the eighth rib.
- DD The integuments and muscles at the back part of the chest, cut rudely through in severing the trunk at that place.
- E The inferior flap of the abdominal muscles, &c. turned down over the thigh, as in the preceding figure.
- F Part of the mons veneris turned aside with the abdominal muscles.
- G The respective part of the left side.
- H The margin of the chest at the left side of the scrobiculus cordis, covered by the peritoneum and muscles, which are turned over it.
- I The ensiform cartilage.
- K K The lower ribs and other containing parts, cut down longitudinally, by which means all the parts, between this section and the scrobiculus cordis were removed, that the viscera of the right hypochondrium might be exposed to view.
- L The posterior and lower part of the right cavity of the chest.
- M The trunk of the descending aorta, tied up where it was cut, and filled with injection.
- N The oesophagus, tied up at the same place.
- O The upper convex surface of the diaphragm, which remains, covered by the pleura, in its natural situation.
- P That part of the centrum tendinosum of the diaphragm which is in the right side.
- Q The trunk of the lower cava tied, close to the upper surface of the diaphragm.
- RR The cut edge of the pleura, where it was reflected, from the upper surface of the diaphragm, to line the inside of the ribs.
- SS The cut edge of the peritoneum, where it was continued as an investing membrane, from the inferior surface of the diaphragm, to the inside of the abdominal muscles.
- The surface which is seen between the edge of the pleura (RR) and that of the peritoneum (SS) is the attachment of the diaphragm cut off from the inside of the ribs.
- T The inside of the transversus muscle covered with the peritoneum.
- U The great, or right lobe of the liver; at the lower edge of which, over against the letter U, there is a small notch formed by the concave bed of the gall bladder, which lies upon the inside of the liver at this place.
- V The small lobe of the liver, which stretches over into the left hypochondrium, and is therefore seen in perspective.
- W The falciform ligament, or remains of the umbilical vein, cut off as it enters the fissure of the liver.
- X The colon passing up from the cæcum to the liver.
- YY The colon with its appendicula adiposæ running towards the left side, between the liver and small guts.
- Z Z The beginning or root of the omentum, coming downwards from the interface of the liver and small guts.
- aaaaa Some turns of those small intestines brought to view by cutting off the omentum a little below the edge of the liver.
- b The womb. Upon its surface we can trace, though obscurely, its veins. These, though injected, were distinguishable only by their colour when the subject was first opened: But when this drawing was made, the part, having been some time in the air, had become a little dry, and the veins projected, as they appear in the figure.
- c The round ligament running down to its passage into the groin.
- d The fallopian tube running backwards on the inside of the os ilium.
- e The fimbriated end of the tube, lying behind the side of the womb; but drawn a little out, that it might be seen.
- Between the round ligament and the tube, are seen the spermatic vessels, especially the vein, which go chiefly, or by their largest branches, to the forepart of the womb where the placenta adhered.
- f The prominent corner of the womb, where the buttocks or loins of the child were distinctly felt before the part was opened.
- N. B. The false ribs of the right side having been removed, those of the left side, by their elasticity raised up the margin of the chest (H) and consequently the ensiform cartilage; the anterior surface of which was thereby turned obliquely to the right side.
- Just before this figure was made, I had observed that the womb had insensibly subsided, and therefore by the cannula of a very small trocar I injected some spirits to raise it up, as nearly as I could guess, to the figure it had when the abdomen was first opened.



Tab. II. *Conformatio uterinum et abdominalis a latere datur, partibus continentibus fibram, et affirmantibus, ut in partu multatis.*

*Ex Hypothecis.*







Fig. 3. *Var. III. Larva venum abdominalis a sinistra lateri, und in Diaphragmate ut superficie, hunc apparatu in delinuenda hui figura, corporum venum infra a parte lateris, anteriori obliqui dorsum, interus quippe protuberans, senuo obvrum vixi interclusum.*

*J. A. Nauy. abd.*

*Th. Meyer, engr.*

### T A B U L A III.

PARTIS trunci inferioris prospectus; oculo scilicet a parte finistri lateris superiori, oblique deorsum ita collineato, ut universa viscerum compages, una cum diaphragmate, in situ suo naturali appareret.

- A Femur sinistrum. Uteri prominentia femur dextrum oculo subtrahit.
- B Clunis sinistra.
- C Integumentorum et muscularum abdominis, lateris sinistri, angulus inferior in inguen et femur inversus.
- D Integumentorum et muscularum abdominis sectio transversa.
- EE Partium abdominis continentium sectio longitudinalis, ab ilium osse sursum ducta. Hac sectione, angulus superior partium continentium omnino auseatur, ut viscera hypochondrii sinistri in conspectu ponantur.
- FF Partium thoracis continentium posteriorum sectio transversa.
- G Vertebra transverse scissa.
- H Medulla spinalis.
- II Cavorum thoracis partes inferiores posticæ; quæ, pulmonibus sublati, vacuæ conspici possunt.
- KK Diaphragma superficiem convexam hepatis complectens.
- L Cartilago mucronata, diaphragmati adhuc adhaerens.
- M Diaphragmatis ad latus dextrum convexitas magna; quæ in hoc cadavere, parte huic consentanea in latere sinistro elatior comparuit. Ibi etiam vasa nonnulla conspicuntur; quorum majora, venæ scilicet phrenicæ, cera impleta sunt a vena cava; hinc altius extantia.
- N Diaphragmatis superficies, qua pericardio annectitur, quæque cor sustinet.
- O Vena cava, ubi per diaphragma transit, deligata.
- P Oesophagus supra diaphragma deligatus. Hunc cera injecta, dum per arterias fluebat, materia colorante amissa, in ventriculum transiens, implevit.
- Q Aorta, eodem modo, ubi corporis truncus transverse fuerat scissus, supra diaphragma, deligata.
- Oesophagus et aorta, una cum spinæ prominentia, cavum fastis magnum in diaphragmatis parte posticæ et superiori efficiunt.
- RSTU Diaphragma in hypochondrio sinistro recisum. Ex parte posteriori, labia (TU) ejusdem fissuræ in diaphragmate mutuo reedunt; et ex parte anteriori, anguli (R S) inversi sunt, nempe ut viscera hypochondrii sinistri in conspectum veniant.
- V Hepatis extremitas sinistra.
- W Ventriculi extremitas sinistra.
- XX Lienis margo anterior denticulatus.
- a Hepatis lobus dexter.
- b Ligamentum falciforme, fissuram hepatis intrans.
- c Hepatis lobi sinistri ea pars quæ in regione epigastrica sedem habet.
- dd Omenti radix dextrosum de ventriculo et colo, hépar inter et intestina tenuia, descendens.
- eff Omenti radix in hypochondrio sinistro ita disposita, ut cavum suum exhibeat. Ea pars, quæ marsupii omenti anteriorem partem facit (ee), quæque de ventriculo descendit, ventriculo jam et hepati incumbit replicata: omenti autem pars posterior, quæ colo connectitur (ff) ante intestina tenuia in proprio manet situ.
- gg Omenti radix, ventriculum inter et lienem.
- hh Omenti pars ad latus sinistrum, in situ suo naturali, tenuia inter intestina et peritoneum faciem internam transversalis abdominis integens.
- iii Intestinorum tenuium gyri multo inferiores et frequentiores hac in parte, quam eorum, quæ in latere dextro jacent; partim propter obliquitatem uteri, præcipue autem quod in latere dextro hepatis moles minus spatii intestinis permittit.
- k Uterus. Tempore quo figura hæc delineabatur, pars uteri superior aerecere cooperat, unde vasa infarcta, magis conspicua sepe exhibebant: minorum pleraque arteriæ sunt; majora omnia venæ.
- l Ligamentum rotundum.
- m Tuba.
- n Arteriæ spermaticæ ramus magnus, trans ligamentum latum ad uterum repens.
- oo Ramorum, venæ scilicet spermaticæ, majorum fasciculus, per ligamentum latum ad uterum ascendentium.

### P L A T E III.

A View, from the left side and downwards, of the lower part of the trunk; so prepared, as to shew the whole mass of the bowels, with the diaphragm, in their natural situation.

- A The left thigh. The right thigh is covered from our view by the projection of the womb.
- B The left buttock.
- C The lower flap of the integuments and abdominal muscles on the left side, turned down over the groin and thigh.
- DD The section of the integuments and muscles, made by the transverse incision of the belly.
- EE A longitudinal section of the containing parts of the belly, carried upwards from the os ilium, or posterior extremity of the transverse incision, parallel to the spine; whereby the upper flap of the containing parts is entirely removed, to shew the viscera of the left hypochondrium.
- F F A transverse section of the posterior containing parts of the chest.
- G The body of the vertebra cut through.
- H The spinal marrow.
- II The lower posterior parts of the cavities of the chest, which are seen empty, the lungs being removed.
- K K The diaphragm, embracing the convex surface of the liver.
- L The ensiform cartilage left adhering to the diaphragm.
- M The great convexity of the diaphragm in the right side, which in this subject was much higher than the analogous part in the left. Upon this part, some vessels are seen: the larger are the phrenic veins, which were filled with wax from the cava, and are therefore prominent.
- N The surface of the diaphragm, where the pericardium is united with it, and upon which the heart rests.
- O The vena cava tied, as it passes through the diaphragm.
- P The oesophagus, tied above the diaphragm. It was filled by the injection, which passed without the red colour, from the arteries into the stomach.
- Q The aorta, in the same manner tied above the diaphragm, where the trunk of the body was cut through.
- The oesophagus and aorta, as well as the projection of the spine, make a considerable notch upon the upper posterior part of the diaphragm.
- RSTU The diaphragm, slit-up in the left hypochondrium. At the posterior part, the lips of the fissure in the diaphragm (TU) recede from each other; and forwards, the corners (R S) are inverted, to shew the viscera in the left hypochondrium: viz,
- V The left extremity of the liver;
- WW The left, or great extremity of the stomach; and
- XX The spleen: its anterior edge indented.
- a The right, or great lobe of the liver.
- b The falciform ligament, entering the fissure of the liver.
- c That part of the small lobe of the liver which lies in the epigastric region.
- ddd The root of the omentum towards the right side, coming down from the stomach and colon, between the liver and the small intestines.
- ee ff The root of the omentum in the left hypochondrium, so disposed as to shew its cavity. What makes the anterior part of the pouch of the omentum (ee) which comes down from the bottom of the stomach, is turned up over the stomach and liver: and the posterior part of the omentum (ff) which is fixed to the colon is left, in its natural situation, before the small intestines.
- g The root of the omentum, between the stomach and spleen.
- hh Part of the omentum in the left side, in its natural situation, between the small intestines and the peritoneum which lines the transversalis muscle.
- iii The convolutions of the small intestines, which are considerably lower and in greater quantity in this side than in the right; partly because of the obliquity of the womb, but chiefly because in that side the liver comes low down, and leaves little space for intestines.
- k The womb: which had begun to dry at its upper part when this figure was taken; so that the injected vessels began to appear more remarkably. The smaller are chiefly arteries; the larger are all veins.
- l The round ligament.
- m The tube.
- n A large branch of the spermatic artery going across the broad ligament to the womb.
- oo A group of large veins from the spermatic, mounting in the broad ligament to the womb.

## T A B U L A IV.

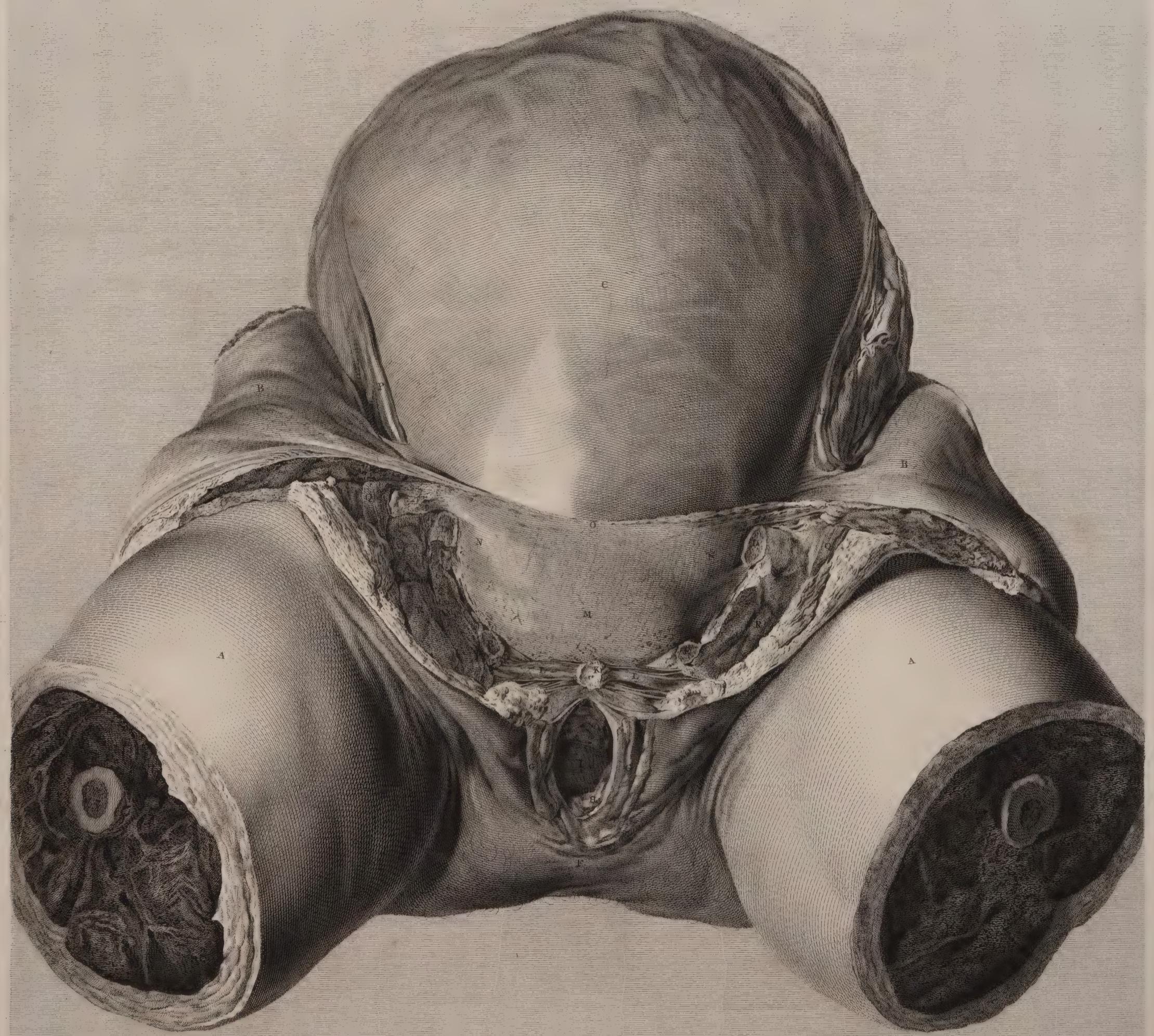
UTERUS, et contenta pelvis a parte anteriori: ossa pubis, cum integumentis, et superiori pudendorum parte, omnino fuerant absissa, quo cervix uteri, et vesica simul urinaria ei praetensa, oculo incidenter.

- AA Femora transverse absissa.
- BB Musculorum abdominis, et peritonei, anguli inferiores, in latera reflexi.
- C Uterus; cuius in tota superficie, perque substantiam, vasa cera impleta, et exinde prominentia, conspicuntur.
- DD Os pubis utrinque supra foramen magnum ischii resectum.
- EE Ischii processus parvus, eo in loco ubi ossi pubis committitur resectus.
- F Perinæum.
- GG Labia pudendi: horum pars superior, nymphæ etiam, et clitoridis extremitas, absinduntur.
- HH Caruncula myrtiformis insignis.
- I Vagina. In parte hujus introitus inferiore (nigriore scilicet in hac tabula), vaginæ cavum, tam retrorsum quam sursum ducens, repræsentatur. Ad literam (I) conspicitur vaginæ pars superior et anterior, quæ cum vesica urinaria et urethra connectitur, quæque a visceribus incumbentibus deprimitur. Ad punctum etiam orificii hujus, fulci, ovati, superius, urethrae extremitas prominens, meatusque urinarii orificium conspicuntur.
- K Clitoridis corpus transverse difcissum: in medio, duas arteriolas sere contiguas, scilicet in utroque corpore cavernoso unam, cernere licet.
- L Clitoridis crura et erectores. Hæc, ossibus pubis quibus annectuntur sublatis, magis horizonti ad libellam, quam in situ suo naturali, respondentia jacent. Sejunctione autem ossium pelvis, nempe ut contenta ejus melius possint conspiciri, extenduntur.
- M Vesicæ urinariæ pars superior, simul utero, pone fito, et caput foetus continenti, simul ossibus pubis unitis, eam exadversum ambientibus, compressa.
- NN Peritoneum reflexum, telaque cellulosa, latera integens pelvis, et ei uteri parti quam ossa pubis amplectuntur, circumjacens.
- O Ex peritoneo et tela cellulosa resectis, margo, eo loco ubi de vesica urinaria ad faciem internam musculorum abdominis tegendam, supra ossa pubis, ascendunt.
- PP Ligamenta rotunda, abdominis intra cavum.
- QQ Ligamenta rotunda, eo in loco ubi ex abdome recedentia sepe in montis veneris lateribus sensim recondunt.
- RR Musculi femoris, ossibus pubis exorti, rescissi.

## P L A T E IV.

A Fore-view of the womb, and of the contents of the pelvis; the ossa pubis, with the muscles and integuments which cover them, being removed.

- AA The thighs cut through.
- BB The lower angles, or flaps of the abdominal muscles and peritoneum turned aside.
- C The womb. All over its surface the injected vessels are seen projecting through its substance.
- DD The os pubis of each side cut through, above the foramen magnum ischii.
- EE The small branch of the ischium which joins the os pubis, cut through.
- F The perinæum.
- GG The labia pudendi. The upper part of those, the nymphæ and the extremity of the clitoris are cut off.
- H A large caruncula myrtiformis.
- I The vagina. At the lower part of this passage, the deeper black part of the surface, in this figure, represents the cavity of the vagina leading backwards as well as upwards: and where this letter (I) stands, is seen the upper or anterior part of the vagina which is united to the bladder and urethra, and which is pressed downwards by the viscera that lie over it. At the upper point of this dark oval orifice, the tuberous extremity of the urethra is seen, with the orifice of the meatus urinarius.
- K The body of the clitoris cut through; in the middle of which two small arteries are seen almost contiguous, viz. one in each corpus cavernosum.
- LL The crura and erectores clitoridis. These lie more horizontally than in the natural state, the ossa pubis, &c. which suspend them, being removed: and they are stretched or lengthened, from the bones of the pelvis being drawn a little asunder that the contents might be better seen.
- M The upper part of the bladder, which was compressed between the womb containing the child's head, which lay behind it, and the united ossa pubis which had embraced it forwards.
- NN The reflected peritoneum and cellular membrane, which lines the sides of the pelvis, surrounding that part of the womb which was embraced by the ossa pubis.
- O The cut edge of the peritoneum and cellular membrane, where these ascend from the bladder to line the abdominal muscles above the ossa pubis.
- PP The round ligaments within the cavity of the abdomen.
- QQ The round ligaments after they have passed out of the abdomen, where they are insensibly lost in the sides of the mons veneris.
- RR The muscles of the thigh, which spring from the ossa pubis, cut through.



S. V. Rymodýk delin!

R. Strange wif.

Pub: Nov: 15. 1774, by Dr. Hunter.







J. C. Wunder delin.  
TAB. V. Uteri pars anterior et dextra, cæliæ manu ab adhærentibus secundinis separata, et in unistrum latus reflecta. Id eo factum  
est consilio, ut pars membranæ decidua ac placenta, cum vasis varundem coriæ repletis, et superficies uteri, cui adhæserant,  
interna cæliæ exponerentur. Partes lineæ designatae proxime sequent tabula sicut integras.

## T A B U L A V.

UTERI pars anterior et dextra, cauta manu ab adhaerentibus secundinis separata, et in finistrum latus reflexa. Id eo factum est confilio, ut pars membranae deciduae ac placenta, cum vasis earundem cera repletis, et superficies uteri cui adhaerant interna, oculis exponerentur. Partes lineis designatas proxime sequens tabula exhibet integras. Priorem autem hic habet locum linearum de sequenti tabula explanatio, ne literae insculptae nimis illam obscurarent.

A A Femorum superiores.

B B De angulis inferioribus partium continentium abdominis, quod superest, in ossa ilium reflexum. Anguli utrinque, peritoneo vasis distincto integuntur; quod vero, ex parte, praesertim in latere finistro, ad cursum vasorum epigastricorum retegendum, excidebatur.

C C Offa pubis supra foramina ischium transverse scissa.

D D Ischium processus ascendentis transverse scissi.

Offa haec pelvis, symphysi pubis sublata, laxa evaserunt; et in latere finistro, ad defensionem uteri in cavum pelvis magis illustrandum, extrorfum fuerunt evulsa.

E E Arteriae inguinales.

F F Vena inguinalis.

G G Arteriae epigastricae.

H H Vena epigastricae.

I I Arteria obturatoria finistri lateris, epigastricae scilicet ramus.

K K K Ligamenta rotunda ex abdomen ad exteriora vasorum epigastricorum descendentia.

L L Sectione integumentorum et muscularum, in utroque inguine, facta nimis, dum partes pelvis anteriores continentis amovebantur.

M M Perineum.

N N Labiorum pudendi partes imae.

O O Hymen reliquiae.

P P Vagina.

Q Q Clitoridis crura.

R R Urethra ex parte superiori in longum diffissa et expassa.

S S S S Vesica urinaria, anteriorem inferioris extremitatis uteri portionem ambiens.

T T Vesica urinariae cavum, partem ejus anteriorem ab urethra sursum incidendo, oculis subiectum.

U U Uteri extremitas parva vel inferior, in cavo pelvis posita. Ea pars quae circundata fuerat margine pelvis, satis evidenter contracta fuit: quam super uterus statim eminentior evasit, quippe partes quae facilis cedunt eum ibi amplectebantur.

V V V Uteri facies exterior.

X X Vasorum spermaticorum in latere finistro chorus.

Y Y Uteri substantia, ad dextrum latus, ab fundo penitus dissecta. In hac sectione vasa refecta occurunt, quod autem ad figuram attinet inordinata, quippe cera friabili adimpta. Vena coloris sunt lucidioris ac grandes; exiliores arteriae, atque suctae; fundum versus uteri utraeque minores quam in parte inferiori, ubi a lateribus uteri ad placentam transibant. Uteri crassitudo cum magnitudine vasorum his in locis proportionis legem quodammodo servat.

Z Z Decidua, sive membrana exterior, ramulis venarum ab facie interna uteri ad eam transeuntium distincta.

a a Hic decidua vasis referta et opaca, cauta manu sublata fuit. Nulla hic loci, vel in chorio, vel in amnio, venarum, ex injectione cerae, species fuit. Altera enim pars per alteram adeo perlacebat, ut foetus cutem distincte cernere licet.

b b Externae superficie placentae portio, hic cera extra venas uteri effusa, illic venis ipsis cera impletis, a facie interna uteri ad eam transeuntibus interstincta.

c c Arteria cera rubri coloris impleta, quae ab utero abrupta fuit, et, semel circumvoluta, in placentam se immisit.

d d Ejus partis uteri, quae deciduum (Z Z) antea obtexerat, facies interna. In hac superficie venae quae per deciduum ramos fuos diffuderunt, abrupte conficiuntur.

e e Ejus partis uteri quae placentam (b b) obtexerat facies interna. Hac quidem superficies cera extra vasa effusa specimen praese tuli. Quae autem aspectu primo, extra vasa effusio videbatur, re vera, venarum complanatarum, cum anastomosibus frequentioribus, ex utero ad placentam per oblique transeuntium, cera adimplerum, species fuit. Cujus quod sequitur fit specimen.

f f In substantia uteri vena.

g g Ejusdem venae in placentam continuatio.

h h Uteri facies interna hic cavata, et venae dimidium, quae cursu per oblique transibat, formans.

## P L A T E V.

THE first view of the opened womb. Its substance is cut through on the right side and turned to the left; by which means part of the decidua and of the placenta, as well as the inside of that portion of the womb, are exposed in the injected state. All the parts represented in outline are seen finished in the next plate. The explanation is given here, that the other might not be obscured with engraved letters.

A A The upper part of the thighs.

B B Part of the lower corners of the containing parts of the abdomen turned down over the ossa ilium. They are covered by the vascular peritoneum; which (in the left side especially) was partly cut away, to shew the course of the epigastric vessels.

C C The ossa pubis cut through above the foramina ischium.

D D The ascending processes of the ischia cut through.

E E The inguinal arteries.

F F The inguinal veins.

G G The epigastric arteries.

H H The epigastric veins.

I I The obturator artery of the left side, a branch of the epigastric.

K K K The round ligaments descending from the abdomen upon the outside of the epigastric vessels.

L L The section of the integuments and muscles in each groin, which was made in removing the anterior containing parts of the pelvis.

M M The perineum.

N N The lower extremities of the labia pudendi.

O O The remains of the hymen.

P P The vagina.

Q Q The crura clitoridis.

R R The urethra slit on its upper part, through its whole length, and spread out.

S S S S The bladder spread round the forepart of the lower end of the womb.

T T The cavity of the bladder exposed by an incision through its forepart from the urethra upwards.

U U U The small or lower extremity of the womb, lodged in the cavity of the pelvis. There was a manifest constriction upon that part of it which was surrounded by the brim of the pelvis; above which the womb swelled out immediately, being there embraced by more yielding parts.

V V V The outside of the body and fundus of the womb.

X X The cluster of spermatic vessels of the left side.

Y Y The substance of the womb cut quite through, from the fundus downwards on the right side. In this section the cut vessels bear an irregular figure, which was occasioned by the crumbling of the wax with which they were filled. The veins are of a light colour, and large; the arteries dark, and small in proportion. At the upper part of the womb, both of them are small in comparison with what they are lower down, where they were passing from the sides of the womb to the placenta: and the thickness of the womb bears some proportion to the size of its vessels in these different places.

Z Z The external membrane, or decidua, full of small branching veins which passed into it from the internal surface of the womb.

a a At this place the vascular and opaque decidua was carefully removed: there was no appearance of injected veins upon the chorion, or in the amnion; both of which were so transparent, that the child's skin could be seen distinctly through them.

b b A portion of the external surface of the placenta, interspersed partly with extravasated wax, from the venal system of the womb, and partly with injected veins, passing into it from the interior surface of the womb.

c c An artery filled with red wax, which was broken off from the womb. It made one circumvolution, and plunged into the placenta.

d d The inner surface of that part of the womb which was in contact with the decidua (Z Z). Upon this surface the veins are seen broken off, which dispersed their branches through the decidua.

e e The inside of that part of the womb which covered the placenta (b b). Upon this surface there was indeed some extravasated wax. But the greatest part of what seemed, at first sight, to be extravasation, proved to be injected veins, of a flattened figure with numerous anastomoses, passing from the womb to the placenta in a very slanting direction. The following instance may serve as a specimen.

f f A vein in the substance of the uterus.

g g The same vein continued into the placenta.

h h The inner surface of the womb hollowed, and forming half of the vein, which passed here in a very slanting direction.

## T A B U L A VI.

### F O E T U S in utero prout a natura positus.

Omnés hujus figuræ partes, utero et iis quæ in eo continentur exceptis, cædem fere sunt cum iis, quæ, in tabula præcedenti lineis exterioribus, literisque jamjam explanatae sunt. In hoc tantum discrepant, nimurum hic vesicæ urinariæ pars superior omnino sublata est, ad foetus caput in parte uteri inferiori exhibendum. Uteri et secundarum pars anterior, una cum placenta, omnino sublata est. Funis umbilicalis est diffusus, deligatus, et in marginem uteri reseci finistrorum reflexus. Ad fundum uteri membranæ investientes etiam in marginem uteri quo melius possint conspiciri inversæ sunt. Caput foetus in uteri parte inferiori, in pelvis scilicet cavo, ponitur; corpus ejus præcipue in latere dextro jacet. Positio obliqua, vel ad lineam diagonalem appropinquans; unde partes posteriores antrorum sunt et ad matris latus dextrum; partes anteriores retrorum et ad latus finistrum versa. Pes dexter inter femur finistrum et tibiam occurrit. Corpus, uti infantibus denuo utero exclusis plerumque fit, muco albo pinguisculo foedatum: scilicet hic mucus, ad dorsi partem superiorem, ex rugis in corpore foetus, motuque suo lineis intersecta, oculis subjicitur. Repræsentatur quæque pars eodem modo quo primum occurrebat, ne quidem vel digitii articulo deturbato, partem aliquam magis illustrandi, aut tabulam elegantiorem reddendi gratia.

## P L A T E VI

### T HIS represents the child in the womb, in its natural situation.

All the parts of this figure, except the womb, and its contents, are nearly the same as those represented by out-lines in the fifth plate, where they are lettered and explained. The only difference is, that here all the upper part of the bladder is cut away, in order to shew the situation of the child's head in the lower part of the womb. All the forepart, both of the womb and of the secundines, (which included the placenta) is removed. The navel-string is cut, tied, and turned to the left side, over the edge of the womb. At the fundus the investing membranes are likewise turned over the edge of the womb, that they might be more apparent. The head of the child is lodged in the lower part of the womb, or in the cavity of the pelvis; and its body lies principally in the right side. Its position is diagonal or oblique: so that its posterior parts are turned forwards and to the right side of the mother, and its foreparts are directed backwards and to the left side. Its right foot appears between its left thigh and leg. Its body was covered with a white, greasy mucus, which is commonly seen on children at their birth. This is represented at the upper part of its back, where it was intersected with lines, from the wrinkles and motion of the child's body. Every part is represented just as it was found; not so much as one joint of a finger having been moved to shew any part more distinctly, or to give a more picturesque effect.



J. V. Rymsdyk delin.

R. Strange Sculp.

TAB. VI. *Fetus in utero, prout a natura positus, rescissis omnino parte uteri anteriori,  
ac Placenta, ad adherente.*

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A. J. Guillemin. didic.

TAB. VII. Sub latto: Rostra parva uteri conspicuntur intima et posterior membrana, nisi adhuc reditum.

Partes lineis adumbratae praevidenti tabula, n. ad plenum dedere.

J. J. Ravent. Sculps.

## T A B U L A VII.

**S**UBLATO fœtu, paries uteri conspicitur intimus et posticus, membranis suis adhuc vestitus. Partes lineis adumbratae in præcedenti tabula se ad plenum dedere.

**A** Partis uteri proje<sup>c</sup>lio versus interna. Hæc nata est a spina, vasis magnis, et præcipue ex aorta, que hic loci in arterias duas iliacas se dividit. Pars proje<sup>c</sup>ta, cadaveris situ supinato adaucta, superiorem et posticam uteri partem in cava duo lateralia retrorsum dividit. Cavum dextrum, propter obliquitatem hujus uteri, sinistro majus fuit, et maximam fœtus partem continuit.

**B B** Partes duæ eodem modo proje<sup>c</sup>tae, scilicet ob projectionem musculorum psoæ, vasorumque iliacorum. Obliqua hæc juga, uteri cava superiora lateralia ab inferiore azygo, in pelve posito, secernunt; in parte hujus ima posteriore oculis subjicitur

**C** Os tincæ, paulo ad latus dextrum versum. Uterus in statu laxo, rugoso, uti fœtu vacuus apparebat, repræsentatur. Paries totus internus membranis suis vestitus. Per eas venæ cera impletæ, tales quales in hac figura, distin<sup>c</sup>te se videndas exhibuerunt.

## P L A T E VII.

**A** Fore-view of the cavity of the womb, as it appeared when the child was taken out, and the investing membranes left adhering. The parts which are expressed by out-lines are nearly the same as in plate V. and VI. the first of which may be consulted for the explanation.

**A** An internal projection of the womb, occasioned by the spine and great vessels, especially the aorta which divides at this place into the two iliac arteries. This projection, which is increased by the supine position of the subject, divides the upper part of the womb backwards into two lateral cavities. The right cavity, from the obliquity of the womb in this case, was larger than the left, and contained the greatest part of the child.

**B B** Two similar projections occasioned, in the same manner, by the projection of the psoæ muscles, and of the iliac vessels. These oblique ridges divide the upper lateral cavities of the womb, from the azygos lower cavity which is situated in the pelvis; at the lower posterior part of which is seen

**C** The os tincæ, in this case a little on the right side. The womb is represented in the loose rugous state, as it appeared when empty; and its whole internal surface is covered by the membranes. Through these the injected veins were distinctly seen, as they appear in this figure.

## T A B U L A VIII.

PARTES proxime post gravidum uterum sitæ; utero ipso fede sua amoto, et in pudenda devoluto. Offa pubis &c. prius fuerant abscissa, ut in tabula quarta.

Femora, partesque cæteras lineis adumbratas, in tabula quinta jam jam explanata, cernere licet.

A A A Uterus.

B B B Intestina tenua quæ fundo uteri arcte circumjacabant.

C C C Intestinorum tenuium (cum mesenterio D D D) gyri, qui, post uterum, in latere sinistro, spinam inter et os ilium, supraque partem oblique prominentem, e musculo scilicet psoa et vasis iliacis formatam, jacebant.

E Intestini ilei pars inferior, (cujus mesenterium F) uterum inter et surcam aortæ decurrens ad

G Terminationem suam in cæco.

H H H Cæcum in cellas corrugatum propter ligamenta carnosa per longitudinem ejus tendentia.

I Cæci ligamentum anterius.

K Appendix cæci vermisformis.

L Cæcum in colon continuatum.

M Colon cum omento, loco in quo sursum et sinistrosum sub hepar ascendit, lineis adumbratum.

N Sinistri lateris colon, post intestina tenuia in faciem internam ossis ilium descendens.

O O Colon vasa iliaca transiens, et in pelvis cavum decurrens rectum continuo appellatum. Id suspensum cernitur de parte extrema mesocoli, supra vasa iliaca sinistra expansi. Hoc in loco intestinum coarctatum fuit, et adipe involutum.

P P In cavo facri, intestini recti priores gyri.

Q Trunci venæ cavæ extremitas, que hic in iliacas se dividit.

R Vertebrae lumborum infimæ facies anterior.

S Substantia, ligamenti natura prædicta, vertebram inter proxime dictam et facri partem summam.

T Offis facri summi facies anterior.

U Vena facra.

Partes quæ literis Q, R, S, T, U, notantur, per peritoneum illis incumbens conspicuntur.

V Ureter dexter vasa iliaca transiens, et in pelvis latus decurrens.

W Arteria dextræ iliaca truncus.

X Venæ dextræ iliaca truncus.

Y Psoas dexter.

Z Arteria iliaca externa.

a Vena iliaca externa.

Ut partes, quæ literis V, W, Y, Z, et a notantur, in conspectum venirent, peritoneum illas obtegens fuerat perfcissum, membranæ cellulosa quæ circumjacabant cultro anatomico sublata.

b Vena iliaca interna.

c Ureter sinistri per membranam cellulosam post peritoneum, et ante arteriam iliaca, ad pelvem transiens. Quo hic in conspectum prodiret, peritoneum et mesocoli pars inferior fuerant perfcissa, paululum etiam membranæ cellulosa sublata.

dd Vasa spermatica dextri lateris post cæcum, peritoneo tecta, descendentes.

ee Eadem vasa ad terminum superiore ligamenti lati, in uterum, tubam, et ovarium se diffundentia.

ff Tuba dextræ pars.

g Ovarii dextri pars.

h Sinistri lateris vasa spermatica.

i Tuba sinistra.

k Ovarium sinistrum.

## P L A T E VIII.

A View of the parts which lay immediately behind the womb, and which were in contact with it. They were brought to view by turning down the empty womb over the pudendum; the offa pubis, &c. having been removed, as in the preceding figures.

The thighs and other parts expressed by out-lines, are nearly in the same state as in plate V. where the explanation is given.

A A A The womb.

B B B The small intestines which lay around, and in contact with the upper part of the womb.

C C C The turns of the small intestines (and D D D the mesentery) which lay behind the womb in the left side, between the spine and os ilium, and above the oblique ridge formed by the psoas and iliac vessels.

E The lower part of the intestinum ileon, and (F) its mesentery. It passed between the womb and the bifurcation of the aorta to

G Its termination in the cæcum, where it was covered externally with an appendicula epiploica.

H H H The cæcum, corrugated into cells by its longitudinal fleshy bands, or ligaments.

I The anterior band or ligament of the cæcum.

K The appendix cæci vermisformis.

L The continuation of the cæcum into the colon.

M The colon and omentum represented in out-lines, where this intestine mounts upwards, and to the left, under the liver.

N The colon in the left side, coming down, from behind the small intestines, upon the inside of the os ilium.

O O The colon passing over the iliac vessels into the cavity of the pelvis, where its continuation is called rectum. It is here suspended by the extremity of the mesocolon which is expanded over the left iliac vessels. At this part the gut was contracted, and involved in fat.

P P The first turns of the rectum in the hollow of the sacrum.

Q The extremity of the trunk of the vena cava, which divides at this place into the iliac veins.

R The forepart of the lowest vertebra of the loins.

S The ligamentous substance between the last mentioned vertebra and the upper part of the sacrum.

T The forepart of the uppermost bone of the sacrum.

U The vena facra.

The parts which are marked Q, R, S, T, U, are seen through the peritoneum that covers them.

V The right ureter, passing over the iliac vessels into the side of the pelvis.

W The common trunk of the right iliac artery.

X The common trunk of the right iliac vein.

Y The right psoas muscle.

Z The external iliac artery.

a The external iliac vein.

The parts marked V, W, X, Z, and a, were brought to view by slitting the peritoneum which covered them, and dissecting away the cellular membrane at that place.

b The internal iliac vein.

c The left ureter passing in the cellular membrane behind the peritoneum, and before the iliac artery, to the pelvis. This was brought to view, by making a long slit in the peritoneum, and lower part of the mesocolon, and taking away a small quantity of the cellular membrane.

d d The spermatic vessels of the right side, coming down from behind the cæcum and covered by the peritoneum.

e e The same vessels at the upper end of the broad ligament, diffusing themselves into the womb, tube, and ovary.

ff Part of the right tube.

g Part of the right ovary.

h The spermatic vessels of the left side.

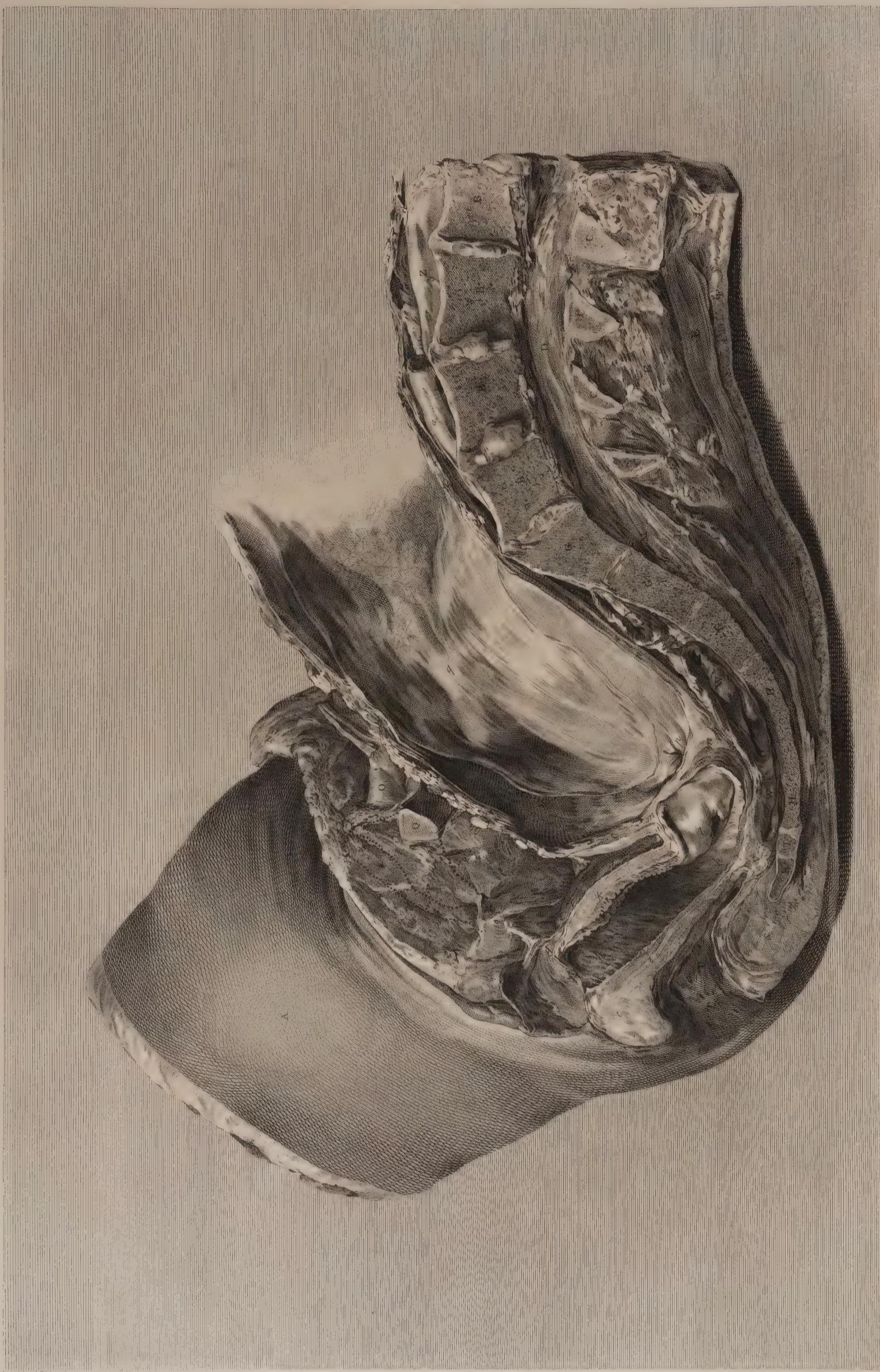
i The left tube.

k The left ovary.









J. A. Hymenop. delineavit.

TAB. IX. *Monita recte formidam spinam ducere, hanc figuram procula perire, quaque videntur, sive suo naturali, non aliquo et primoris dextre et latitudine, parte  
Quælibet adiuncta pectori, ad delinquentem procedentes tachulas, mucronem et mandibulam, adhuc suppeditat, tachula 22.*

G. Scrin. Sudor.

## T A B U L A I X.

**P**ELVIS a latere ad plenum conspecta, una cum contentis ejus, partibusque contiguis; per medium scilicet divisa, ut ossium flexuræ, et situs partium internarum oculo facilius exhiberi possent. Imperfecta est hæc figura ad pubem, extrorsum pariter atque introrsum. Partes quæ hic deficiunt, cultro separatae sunt, dum cadaver ad aliquas tabularum præcedentium pingendas parabatur. Defectum autem abunde supplebit tab. XXII, in hunc finem delineata.

- A** Femur dextrum a parte interiori.
- B B B B** Lumborum vertebræ quatuor inferiores. Has inter cernitur substantia ligamentosa, extans, inæqualis, circa medium præsertim ubi mollissima est, et facile tumescit, si quando secta fuerit, et in aqua macerata.
- CCCC** Vertebrarum earundem processus spinæ.
- D** Vertebrarum lumborum canalis, in quo reliquæ quædam caudæ equinæ, obscure licet, conspicuntur.
- E E** Musculorum lumbos extendentium partes inferiores.
- F** Lumborum membrana adiposa et cutis.
- GGG** Sacri ossa tria superiora.
- H H** Sacri ossa duo inferiora, primumque coccygis, firmiter coailata.
- I** Coccygis os secundum, quod, ope medie cartilaginis, ad primum facile movetur.
- K** Coccygis ossa duo inferiora in unum coailata, parique ad secundum mobilitate prædicta.
- L** Sacri spina. — **M** Sacri canalis.
- N** Musculorum abdominis et integumentorum anguli inferioris pars, in ossis ilium spinam reflexa.
- O** Vena inguinalis magna epigastricam emittens, quam etiam arteria ejusdem nominis comitatur.
- P** Femoris musculi, ex osse pubis orti, quique in osse eo sejungendo fuerant per scissi.
- Q** Os pubis supra foramen magnum diffissum.
- R** Idem os, ubi ramo parvo ischii committitur, diffissum. In loco quo litera **P** occurrit, lineis punctis adumbrata representatur partis ejus ossis pubis, quæ abscissa fuerat, figura. Nota \* iisdem lineis adumbratam symphysin ostendit.
- S** Pars carnoa anum inter et os coccygis.
- T** Anus omnino apertus.
- U** Recti pars inferior hac sectione exposita. In hac figura videoas, intestinum idem ab ano sursum progrediens oculo dum persequeris, id se retrosum deflexisse, nempe ut ad faciem internam ossis coccygis veniret.
- V** Hic rectum ad latus sinistrum se deflexit, solamque membranam suam cellulosam in hac sectione cernere licebat.
- WW** Rectum sectione apertum, ubi ante coccygis os primum, sacrum ossa tria inferiora, decurrebat.
- X** Hic rectum omnino in latere dextro jacebat, nec id aperuit scissura.
- Y** Rectum diffissum, ubi de latere dextro ad os secundum facri decurrebat, et in flexuram coli sigmoideam cursum suum tenebat.
- Z** Vena cava. — **a** Arteria iliaca dextra.
- b** In hoc loco vena iliaca sinistra fuerat diffissa; cera autem, quæ injecta fuerat, utpote friata, jam delapsa, vena haud fatis clare se in conspectum dedit.
- c** Perinei scissio.
- d** Labii dextri, ad partem inferiorem, facies interna.
- e** Nymphæ dextræ, ad partem inferiorem, facies interna.
- f** Coarctatio, hymenive reliquæ, ubi incipit vagina.
- g** Meatus urinarius extremitas. — **h** Vagina cavum.
- i** In hoc loco vagina et rectum sunt coalita. Rectum vagina densius.
- k** Vagina pars anterior, cum urethra et vesica urinaria conjuncta.
- ll** Os uteri in vagina, ad os coccygis vergens.
- o** Quamvis in hoc cadavere fundus uteri dextrorum inclinatus fuerat, os uteri tamen adeo ad dextrum se tenebat, ut cultrum anatomicum has partes fecantem fugeret.
- mm** Ad os tincæ, uteri et vaginae substantia coailata.
- nn** Uteri in duas partes aequales scissi margo posterior.
- oo** Uteri scissi pars anterior. Scissio hæc nequaquam per medium uteri se habebat, sed ad latus dextrum haud paululum; etenim ut figura præcedentes commode possent delineari, cadaver hoc modo necesse habui disponere.
- p** Os uteri intus. — **q** Uteri paries internus membranis suis velutitus. Fundus uteri in hac figura non representatur; tum quoniam id a proportione alienum duxi, tum quoniam uterus adeo flaccidus et tener tunc temporis erat, ut in situ suo naturali, ad arbitrium et usum pictoris, minime potuerit retineri.
- r** Meatus urinæ.
- s** Vesica urinaria pars inferior, uteri cervicem inter et vaginae partem superiorem sita. Omnis vesicæ portio post symphysin pubis sita jamdum abscissa fuerat. Melius autem mihi vînum est, figuram vel curtam dare, quam aliquod ingenio excogitatum pingere.

## P L A T E I X.

**A** Full side-view of the pelvis with its contents, and adjacent parts, cut down through the middle, to shew the turns of the bones, and the situation of the internal parts. This figure is imperfect at the pubes, both externally and internally; the defective parts having been cut away, in preparing the subject for some of the preceding figures. But what is wanting in these, may be seen in plate XXII, which was intended as a supplement to this.

- A** The inside of the right thigh.
- BBBB** The bodies of the four lowermost lumbar vertebræ. Between these the ligamentous substances are represented prominent, and unequal, especially near the centre, where they are softest and most disposed to swell when soaked in water, and cut through.
- CCCC** The spinal processes of the same vertebræ.
- D** The canal of the lumbar vertebræ in which some remains of the cauda equina is indistinctly seen.
- EE** The lower part of the extending muscles of the loins.
- F** The adipose membrane and skin of the loins.
- GGG** The three superior component bones of the os sacrum.
- HH** The two lowermost bones of the sacrum, and the first of the coccyx, firmly ankylosed.
- I** The second bone of the coccyx, moveable on the first by means of an intermediate cartilage.
- K** The two last bones of the coccyx grown into one, and moveable on the second bone by the intervention of a cartilage.
- L** The spine of the sacrum. — **M** The spinal canal in the sacrum.
- N** Part of the lower flap of the abdominal muscles and integuments, turned over the spine of the os ilium.
- O** The great inguinal vein, sending off the epigastric, which is accompanied with the artery of the same name.
- P** The muscles of the thigh which arose from the os pubis, and which were cut through when that bone was removed.
- Q** The os pubis cut through above the foramen magnum.
- R** The same bone cut through at its conjunction with the small branch of the ischium. Where the letter **P** stands, is represented, in dotted out-lines, the figure of that part of the os pubis which was cut off, and the mark \* is upon the symphysis in the same out-lines.
- S** The fleshy part between the os coccygis and the anus.
- T** The anus considerably opened.
- U** The lower part of the rectum laid open by the section. In tracing the gut from the anus upwards, we see from this figure that it takes a bend backwards, to get at the inside of the os coccygis.
- V** Here the rectum made a turn to the left side, and its surrounding cellular membrane only was seen in the section.
- WW** The rectum laid open by the section, where it runs before the first bone of the coccyx, and the three lowermost pieces of the sacrum.
- X** Here the rectum lay entirely in the right side, and was not opened by the section.
- Y** The rectum cut through, by the section, where it passed from the right side, across the second bone of the sacrum, and was continued into the sigmoide flexure of the colon.
- Z** The vena cava. — **a** The right iliac artery.
- b** Here the left iliac vein was cut through: but the brittle wax with which it was filled had fallen out, and the vein was seen indistinctly.
- c** The section of the perineum.
- d** The inside of the lower part of the right labium.
- e** The inside of the lower part of the right nymphæ.
- f** The stricture at the beginning of the vagina, or remains of the hymen.
- g** The extremity of the meatus urinarius. — **h** The cavity of the vagina.
- i** The compound substance of the vagina and rectum, the latter of which is considerably the thickest.
- k** The forepart of the vagina united with the urethra and bladder.
- ll** The mouth of the womb in the vagina, directed towards the os coccygis. Though the bottom of the womb, in this case, was directed towards the right side, its mouth lay so much on the right side, that it was not touched in making the middle section of all the parts.
- mm** The substance of the womb and vagina blended, at the os tincæ.
- nn** The edge of the bisected womb backwards.
- oo** The edge of the womb forwards. This section was not in the middle, but considerably on the right side. It had been made to prepare the subject for some of the preceding figures.
- p** The mouth of the womb internally.
- q** The inside of the womb lined with the membranes.
- r** The bottom of the womb is not represented in this figure; both because it was not very material here, and because it was become so flaccid and tender, that it could not be well kept out, in its natural situation, before the painter.
- s** The membranes were almost entirely separated from the womb, of themselves, when this figure was made. In the upper part the decidua was full of small veins, even where it parted of itself from the womb; but near the mouth of the womb, hardly any such vessels appeared.
- t** The meatus urinæ.
- f** The lower part of the bladder, placed between the neck of the womb and the upper part of the vagina. The upper part of the bladder, which was situated behind the symphysis of the pubes, had been cut away before this section was made; and we chose to leave the figure imperfect, rather than venture to delineate from fancy.

## T A B U L A X.

### F I G. I.

**U**T E R I pars anterior et extima, prout se videndam praebuit, omnino fccata, exhibens faciem vasorum uterinorum, quam illa prae se ferunt, eo loci ubi placenta utero adhæret.

Venæ cera flava impletæ, ab arteriis, magnitudine, colore lucidiori, anastomosibus pluribus, facile dignoscuntur. Arteriæ enim, minores, pauciores, flexuofæ, coloris magis luridi hic loci sunt. Arteriæ omnes convolutæ; pauciores autem videbantur, quia multi earum ramuli, cera flava, venis prius injecta, impletæ fuerint. Hujus exemplum unum est ad literam *A*.

Venas profundius sitas, per uterum fccatum cernere non licuit; indistinctæ igitur, nulloque ordine, ita uti visæ sunt, delineantur.

### F I G. II.

Facies interna placentæ, cujus vasa per funiculum umbilicalem cera sunt repleta.

*A* Cannula ænea in arteriarum alteram umbilicalium inserita, per quam utraque arteria cera viridi implebatur.

*B* In vena cannula, per quam cera cœrulea illi injecta fuit.

*CC* Amnion, in parte quadam placentæ, laxum relictum.

*DD* Placentæ, qua amnion sublatum est, superficies intima chorio productio cooperata. Hoc in loco rami primi vasorum umbilicalium conspicuntur. Arteriæ colore lucidiori facile possunt dignosci.

Hic arteriæ quidem lucidiores, ut in figura, apparebant; tunc scilicet earum pellucidis colorem ceræ injectæ viridem lucidorem transmittentibus: In funiculo autem umbilicali aliter se res habet; quippe vena, in medio posita, undique glutinosa funiculi substantia fuit intacta; unde cera cœrulea ad livorem proprius accedens visa est.

*E* Decidua pars in margine placentæ relicta, inque faciem ejus internam reflexa; nempe ut superficies ejus exterior, utero quæ adhæserat, vasis parvulis (cera flava per venas uteri impletis) referta, possit exhiberi.

Placentæ cera flava ubique turgida, quæ substantiam ejus cellulofam adeo implevit, ut in facie interna ubique per chorion transluceret. Cera ubique quasi in grana abiit, quod inde cava naturalia impleverat, indicium certum exhibens: si enim placentam, vasis effusa implevisset, in massas majores, irregulares formatam, se ad conspectum dedisset. Cera in hanc spongiosam, five cellulofam partem, injecta, placentæ crassitudo naturali duplo major evaserat.

### F I G. III.

Mulieris, die secundo post partum extinctæ, uteri superficies internæ pars.

Decem his tabulis jam delineatis, eas statim in lucem edere propofui; et simul hancce tertiam figuram, quasi supplementum, addere, utpote solum quod tunc temporis potui. Difcrimen exhibet inter superficiem uteri (*A, B, C*) cui membranae adhæserant, et superficiem (*D, E, F*) cui placenta se immiserat; illam quidem lœvem et unius formæ; hanc autem orificiis magnis venarum refertam. Ubi primum hæc orificia sub examen venerant, omnia grumis coagulati fanguinis referta comperti, in cavum uteri non-nihil extantibus. Utero vero aliquamdiu in aqua macerato, coagula hæc magis albida evaserunt; nonnulla exciderunt; et aliqua etiam extracta sunt, ut venarum orificia clarius monstrari possent. Ita se res habuit, cum figura hæc delineabatur.

## P L A T E X.

### F I G. I.

*A* View of the outside of the forepart of the womb, as it appeared when quite dry; exhibiting a specimen of the uterine vessels, at the part where the placenta adhered.

The veins were filled with yellow wax, and are readily distinguished by the largeness, light colour, and frequent anastomoses, from the arteries, which are here smaller, less numerous, serpentine, and of a darker colour. The arteries were all convoluted; but they did not appear to be so numerous, because many of the branches were filled with the yellow wax, which had been thrown into the veins. This is seen, in one instance, at the letter *A*.

The deeper-seated veins could not be distinctly seen through the dried substance of the womb, and are therefore represented with the same obscurity and confusion which appeared in the object itself.

### F I G. II.

The inside of the placenta, which was injected by the umbilical vessels after it was taken out of the womb.

*A* A brass-pipe tied into one of the umbilical arteries, by which the two arteries were filled with green wax.

*B* A pipe in the vein, by which it was filled with blue wax.

*CC* The amnion left loose upon one part of the placenta.

*DD* The internal surface of the placenta, where the amnion was removed, covered by a continuation of the chorion: upon this are seen the first branches of the umbilical vessels. The arteries are sufficiently distinguishable by their lighter colour.

They appeared so from being filled with a lighter coloured green wax, and from the transparency of their coats: but on the navel-string it was the contrary; because the vein, being the most central, was covered with a greater thickness of the gelatinous substance of the string, and therefore did not allow the darker-coloured blue wax to be so well seen.

*E* Part of the decidua left at the edge, and turned over the inside of the placenta, so as to shew its outer surface (which had adhered to the womb) full of small vessels, injected with yellow wax from the uterine veins.

The body of the placenta was uniformly filled with the yellow wax. This had so completely filled all the cellular substance of the placenta that upon the inside it appeared every where through the chorion. And the wax was every where manifestly granulated; so that it had plainly filled natural cavities: for if it had filled the substance of the placenta by common extravasation, it would have formed itself into irregular and large masses. From this injection of the pungy or cellular part, the placenta had acquired at least double its natural thickness.

### F I G. III.

A portion of the internal surface of the womb, from a woman who died two days after delivery.

When these ten plates were finished, I intended to have published them immediately; and this third figure was added, as the only supplement which I could give at that time. It shews the difference between the surface of the womb (*A, B, C*,) where the membranes had adhered, and that surface (*D, E, F*,) to which the placenta had been fixed. The first was much more smooth and uniform; the latter was full of large venous orifices. At the first examination, all these orifices were found filled up with plugs of coagulated blood, which projected some way into the cavity of the womb. The part being steeped some time in water, they became whiter, and many of them fell out, or were pulled out, to shew the orifices of the veins more clearly. In this slate the drawing was made.

Fig. III.

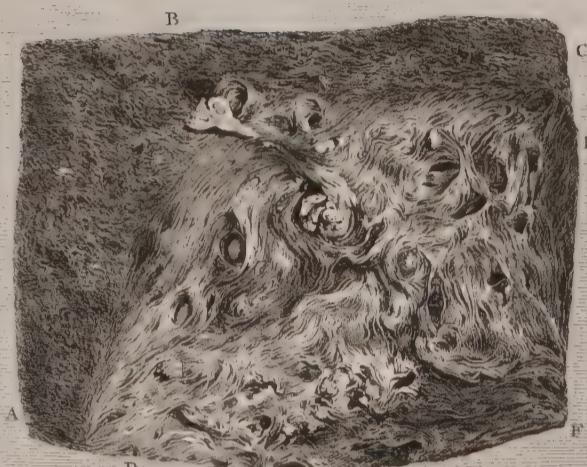


Fig. II.

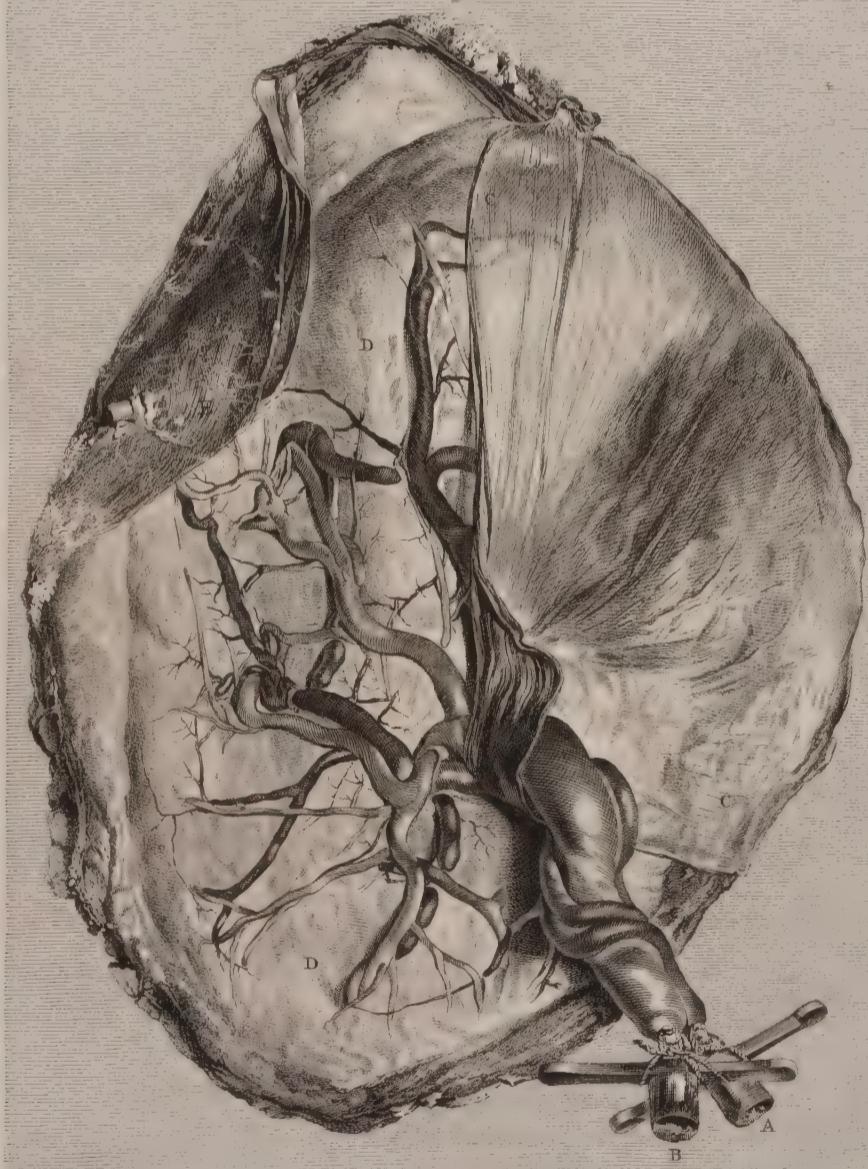
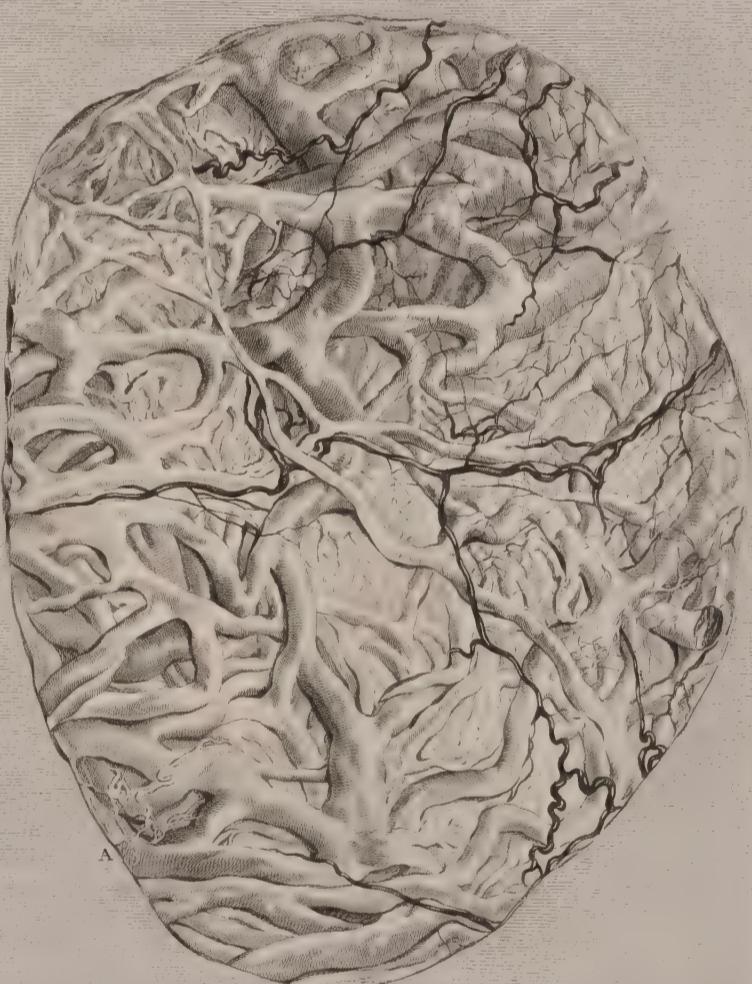


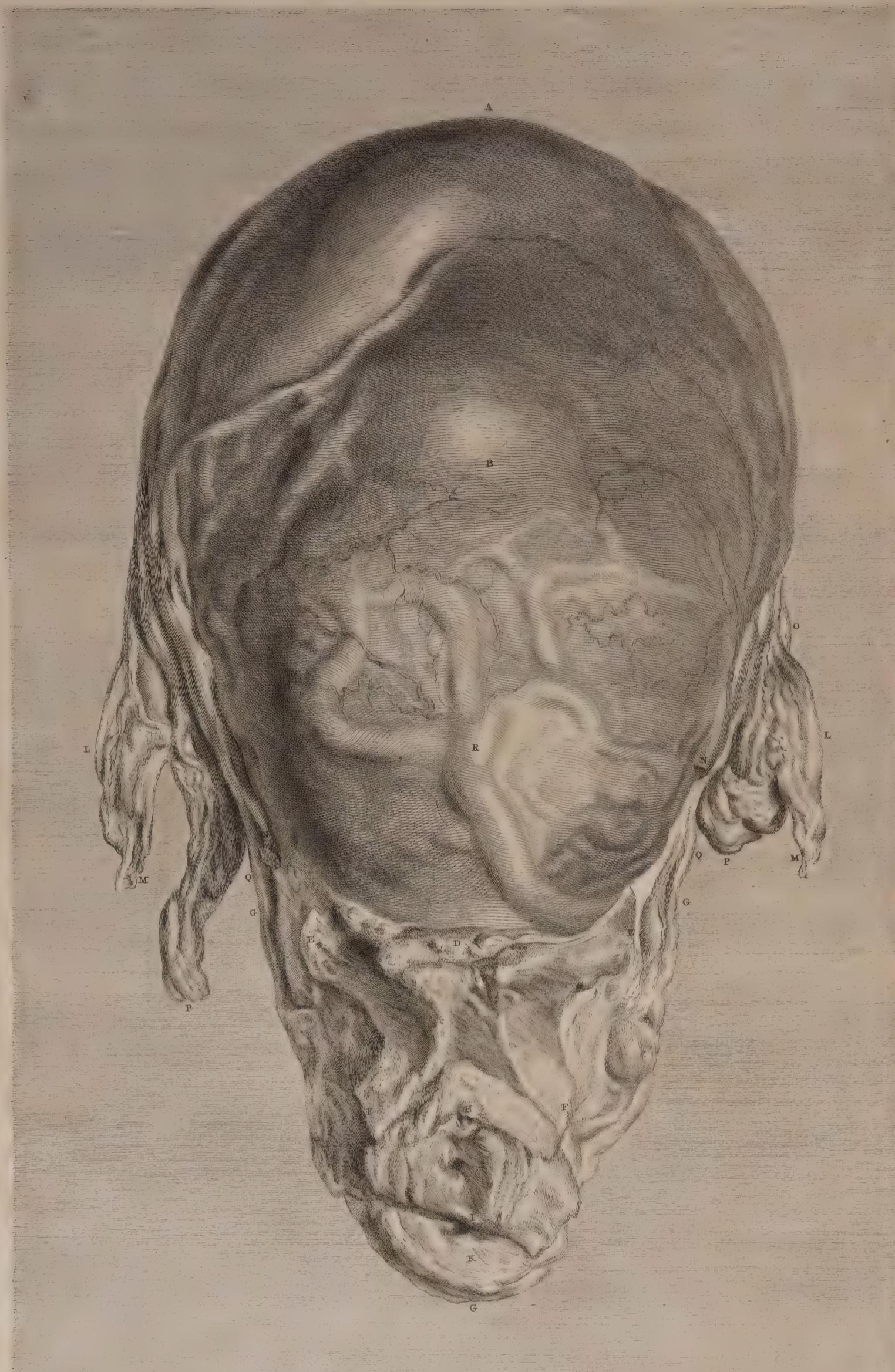
Fig. I.



*L. V. Rynsdyk delin.<sup>5</sup>*  
TAB. X. Fig. I. Uteri pars anterior et extima, prout se præbuit omnino siccata, exhibens faciem vasorum uterinorum, quædem præ se-  
ferunt colores, ubi Placenta utero adhaeret. Fig. II. Siccata interna Placenta, cæsis vasa per pumiculum umbilicalem cæsi sunt repletæ.  
Fig. III. Ab aliâ muliere biduo post partum extinctori, exhibet partem superficiæ intima uteri.







J.S. Rymontek delin.

P. Malevus sculp.

TAB. XI ab alia muliere, nono graviditatis mense hemorrhagia uterina e medio sublati. Conspicitur  
uterus, et osia pubis juxta naturam sita. Vasae injecta cordi turgida, quaque ad partem inferiorem et  
cervicem uteri diconvolutur opere amplissima, arguunt. Placentam parti illi adhaesit.

## T A B U L A XI.

**A** B alia muliere, nono graviditatis mense haemorrhagia uteri na e medio sublata. Conspicitur uterus, et ossa pubis juxta naturam sita. Vasa, injecta cera, turgida; quæque ad partem inferiorem et cervicem uteri dignoscuntur esse amplissima, arguunt placentam parti illi adhaesisse.

**A** Fundi uteri pars media et summa.

**B** Uteri pars quæ scilicet in cadavere fuit ex adverso umbilici.

**C** Symphyse ossium pubis.

**D** Membrana adiposa ad fundum vesicæ urinariæ.

**E** Os pubis utrinque, ad locum fere quo ossi ilium committitur, per scissum.

**F** Utriusque ossis ischii ramus parvus, ad locum quo ossi pubis adiungitur, per scissum.

**G G G** Contenta pelvis omnia, antrorum ossibus pubis obtecta.

**H** Infra hanc literam meatus urinarius orificium.

**I** Ab hac litera sursum ad meatum urinarium vaginæ principium; infraque hanc literam aditus ad rectum.

**K** Strato intimo ani sphincteris circumtectus.

Labia pudendi, perineum et anus hic non habent locum; in situ enim suo reliæ erant in cadavere, quippe illud externe multilum et deforme reddere non licet.

**L L** Tubæ.

**M M** Fimbriæ.

**N N** Ligamenta rotunda.

**O** Ovarii pars.

**P P** Vasorum spermaticorum utrinque ad uterum ascendentium fasciculus.

**Q Q** Vasa hypogastrica, in latere uteri, ad conjunctionem cum spermatis ascendentia.

**R** Uteri venæ magnæ in loco cui placenta interne adhaerebat.

## P L A T E XI.

**F** ROM a second subject, viz. a woman who died of a flooding in the ninth month of pregnancy. It represents a fore-view of the womb, with the ossa pubis in the natural situation. The situation of the large vessels, which were injected, shews, that the placenta was attached forwards, and to the lower part of the womb.

**A** The middle and highest part of the bottom of the womb.

**B** That part of the womb which, as it lay in the dead body, was directly opposite to the navel.

**C** The symphyse of the ossa pubis.

**D** The adipose membrane upon the fundus of the bladder.

**E** The os pubis of each side, cut through near its union with the os ilium.

**F** The small branch of each os ischii, cut through near its conjunction with the os pubis.

**G G G** The whole contents of the pelvis covered forwards by the ossa pubis.

**H** Immediately below this letter is seen the orifice of the meatus urinarius.

**I** From this letter upwards to the meatus urinarius is seen the beginning of the vagina; and immediately below this letter I is seen the passage into the rectum, surrounded by

**K** The inner stratum of the sphincter ani.

The Labia, perineum and anus were left in the body, that it might not be disfigured outwardly.

**L L** The tubes.

**M M** The fimbriæ.

**N N** The round ligaments.

**O** Part of the ovary.

**P P** The group of spermatic vessels, on each side, approaching the womb.

**Q Q** The hypogastric vessels mounting upon the sides of the womb to join the spermatic.

**R** The great veins of the womb in that place to which, internally, the placenta was attached.

## T A B U L A XII.

**A** B eadem, qua præcedens, muliere, exhibit apertum plane a parte postica uterum cum vagina, quo situs foetus, parque inferior placentæ, sub foetus capite, indicarentur. Placenta scilicet orificio uteri interno accreverat, eoque sub finem graviditatis dilatato, separata est: unde hæmorrhagia, et mors.

**A A** Tubæ fallopianæ.

**B** Ovarium sinistrum; cuius ad extremitatem inferiorem videre est

**C** Corpus luteum extans.

**D** Ovarium dextrum.

**E** Værorum spermaticorum ad uterum ascendentium fasciculus.

**FFF** Substantiæ uteri sectio.

**G** Vaginae per incisionem apertæ et expassæ facies interna.

**HH** Os uteri.

**I** Placenta partis inferioris facies externa, in lobos partita, quæ quondam cervici et ori uteri interne adhæserat; tempore autem parturiendi instante, partium illarum dilatatione sejuncta fuerat, unde necessario hæmorrhagia.

**KK** Membranæ de margine placentæ exeuntes, capitisque foetus partem inferiorem amplectentes, per se cæsse. Spatium, quod inter cervicis uteri partem interiorem, et secundas, vacuum occurrit, in cadavere fætus coagulato refertum comperti.

Situs partefque foetus explanatione non eagent.

## P L A T E XII.

**F**ROM the same subject, a view of the womb and vagina fully opened on the back part, to shew the situation of the child, and of the lower part of the placenta at the inside of the mouth of the womb, under the child's head, and detached from the womb; the occasion of the fatal hemorrhage.

**AA** The fallopian tubes.

**B** The left ovary, at the lower end of which is seen

**C** The projecting corpus luteum.

**D** The right ovary.

**E** The group of spermatic vessels approaching the sides of the womb.

**FFF** The section of the substance of the womb.

**G** The inside of the vagina, which is laid open by a longitudinal incision, and spread out.

**HH** The mouth of the womb.

**I** The external lobulated surface of the lower part of the placenta; which had originally stuck to the inside of the neck and mouth of the womb; but as parturition approached, the dilatation of these parts occasioned a separation, which was necessarily followed by an hemorrhage.

**KK** The membranes cut through where they were coming out from the border of the placenta, and enclosing the most depending part of the child's head. The vacant space which is seen between the inside of the neck of the womb, and the secundines, was full of clotted blood in the dead body. The situation, and the several parts of the child require no explanation.



*J. Rymer delin.* *J. Mitchell sculp.*  
TAB. XII. ab eadem, qui praevidens, muliere, exhibet apertum planè a parte posteriori uterum cum vagina,  
quo situs fortius, parque inferior Placenta sub rotulus capite indicarentur. Placenta, scilicet orificio  
uteri interno accrescent, ergo sub finem graviditatis dilatato fotali inle divisione separata est.

Pub: Nov: 15. 1774, by Dr. Hunter.







*Hymatop. datur.*

*Michel sculp.*

TAB. XIII. A tertio cadavere, nono graviditatis mense. Aperto Utero (Vagina et Vesica urinaria integris) incisis, vellet, una cum anteriori Uteri pariete, secundinis, et adhaerentibus, et in fundum Uteri reclinatis, situs Polus (qui hunc eretus est) conspicitur. Sunt Uteri cervi erant repleta.

Pub: Nov: 15: 1774, by Dr. Hunter.

## T A B U L A XIII.

**A** Tertio cadavere, nono graviditatis menfe. Uteri conspectus ab anteriori, cum vagina et vesica urinaria. Pariete hujus anteriori, cum secundis ei adhærentibus, inciso, et in fundum ejus reclinato, situs fœtus erecti conspicitur. Vasa uteri, cera prius injecta, turgida fuerunt.

**A** Vesica urinaria in situ suo naturali, respectu habito ad uterum.

**B** Vaginæ pars superior et extima, quæ sub symphyse ossium pubis jacet, quæque ibi cum urethra connectitur.

**C** Vaginæ cavum in conspectu positum, cum labia partesque aliæ externæ fuerant abserratae, quo specimen hoc e cadavere eximiretur.

**DD** Vasa spermatica, ad uteri latera ascendentia.

**EE** Tubæ; quarum extremitates, seu fimbriæ, sub racemo vaorum spermaticorum, occultantur.

**F** In uteri latere dextro, vena magna, ab anastomosi venarum, hypogastricæ scilicet et spermaticæ, ortum suum ducens.

**GG** Ligamenta rotunda.

**HH** Uteri pars anterior, cum portione placentæ quæ ei adhærebant, incisa, et in fundum uteri reclinata, ut fœtus in conspectum prodiret.

**III** Uteri substantiæ, et membranarum investientium, secchio.

**KK** Eadem secchio per placentæ substantiam ducta, quæ uteri parti anteriori in latere dextro adhærebat. Ex figura inversa latus extrum finistrum fit.

**L** Funis umbilici, a fœtu ad placentam transiens.

## P L A T E XIII.

**F**ROM a third subject, in the ninth month of pregnancy. A fore-view of the womb (with the vagina and vesica urinaria) in which all the inclosing parts were cut through, and turned up, to shew the situation of the child, with its head upwards. The vessels of the womb had been previously injected.

**A** The bladder, in its natural situation with respect to the womb.

**B** The upper and external part of the vagina, which lies under the symphyse of the os pubis, and where the urethra is united with it.

**C** The cavity of the vagina exposed, where the labia and other external parts had been cut off, in taking this part from the dead body.

**DD** The spermatic vessels, passing up towards the sides of the womb.

**EE** The tubes, of which the extremities, or fimbriæ, are concealed behind the group of spermatic vessels.

**F** The great vein on the right side of the womb, formed by the anastomosing hypogastric and spermatic veins.

**GG** The round ligaments.

**HH** The forepart of the womb, with that part of the placenta which adhered to it, cut up, and turned back over the fundus of the womb, to bring the child to view.

**III** The section of the substance of the womb, and of the investing membranes.

**KK** The same section carried through the substance of the placenta, which, in this case, was fixed to the forepart and right side (which is the left in this inverted figure) of the womb.

**L** The navel-string passing from the child to the placenta.

## T A B U L A XIV.

**A** Quarto cadavere, nono itidem graviditatis mense. Fasciculi fibrarum muscularium, in parte interna uteri, triplici figura exhibentur.

Hac parte uteri per aliquot dies in aqua macerata, decidua jam tenera abstergebatur.

### F I G. I.

Uteri inverfi, et in latus paululum reclinati, facies posterior interna.

- A** Uteri os relaxatum; supra quod, paulo obscurius licet, cervicis rugæ, ramorum adinstar dispositæ, cernuntur.
- BB** Uteri pars angusta, margine pelvis antea circumcincta.
- CC** Seta in orificio utriusque tubæ; quam circum fasciculi fibrarum ad musculos pertinentium, in orbes, eodem centro terminatos, se disponunt.
- D** Hic fasciculi, in orbem dispositi, uterum cingunt.
- E** Uteri fundi pars media, qua ordines hi duo fibrarum, tubas cingentium, inter se coëunt, sive se invicem contingunt.
- F** Interstitium triangulare, tres inter ordines fibrarum prædictarum, ubi mutuo inter se coëunt, diversumque ordinem et cursum tenent.

### F I G. II.

Ejusdem uteri, forma minuta, conspectus a latere.

- A** Uteri os.
- B** Seta in orificio tubæ.
- C** Fibrarum, fine ordine dispositarum, stratum, faciem internam fasciculorum, qui in circulum flectuntur, obtegentes.

### F I G. III.

Ejusdem uteri partis anterioris facies interna.

- A** Os uteri; supra quod rugæ anteriores, in ramos abeunt, se in conspectum dant.
- B** Superficie cui placenta adhæserat pars media, ubi fibræ fascias fine ullo ordine formabant; quas inter, venarum orificia, in placenta partem spongiosam cursum tenentium, passim occurunt. Ad cervicem uteri, fibræ musculofæ, in fasciculos collectæ, nullæ conspicuntur.

## P L A T E XIV.

**F**ROM a fourth subject, at nine months. This shews the disposition of the muscular fasciculi on the inside of the womb, in three different views.

The part was steeped in water some days, whereby the decidua was made tender, and then brushed off.

### F I G. I.

The inner surface of the posterior part of the womb, turned a little to one side.

- A** The relaxed mouth of the womb, over which are faintly seen the branching rugæ of the neck of the womb.
- BB** The narrow part of the womb, which was embraced by the brim of the pelvis.
- CC** A bridle put into the orifice of each tube, round which the fasciculi of muscular fibres are ranged into concentric circles.
- D** The fasciculi going circularly round the body of the womb.
- E** The middle of the fundus of the womb, where the two orders of circular fibres, which surround the tubes, meet, or become reciprocally tangents.
- F** The triangular interstice between the three orders of circular fibres, where they are all blended, and take a variety of directions.

### F I G. II.

A side-view of the same womb, in miniature.

- A** The mouth of the womb.
- B** A bridle in the orifice of the tube.
- C** An irregular stratum of fibres, upon the inside of the circular fasciculi.

### F I G. III.

The inner surface of the anterior part of the same womb.

- A** The mouth of the womb: over which are seen the anterior branching rugæ.
- B** The centre of the surface to which the placenta adhered, where the fibres formed irregular, interwoven bands; in the interstices of which were the orifices of the veins which went into the spongy part of the placenta.
- At the cervix no distinct muscular fibres appear on the internal surface of the womb.

Fig. I.



Fig. III.



Fig. II.



Rymondi delin.

Monil Sculp.

TAB. XIV. *Al quarto Cadavere, nono itidem graviditatis mense. Fasciculi fibrarum muscularium, in parte interna uteri, triplici figura exhibentur.*





Fig. IV.



Fig. I.

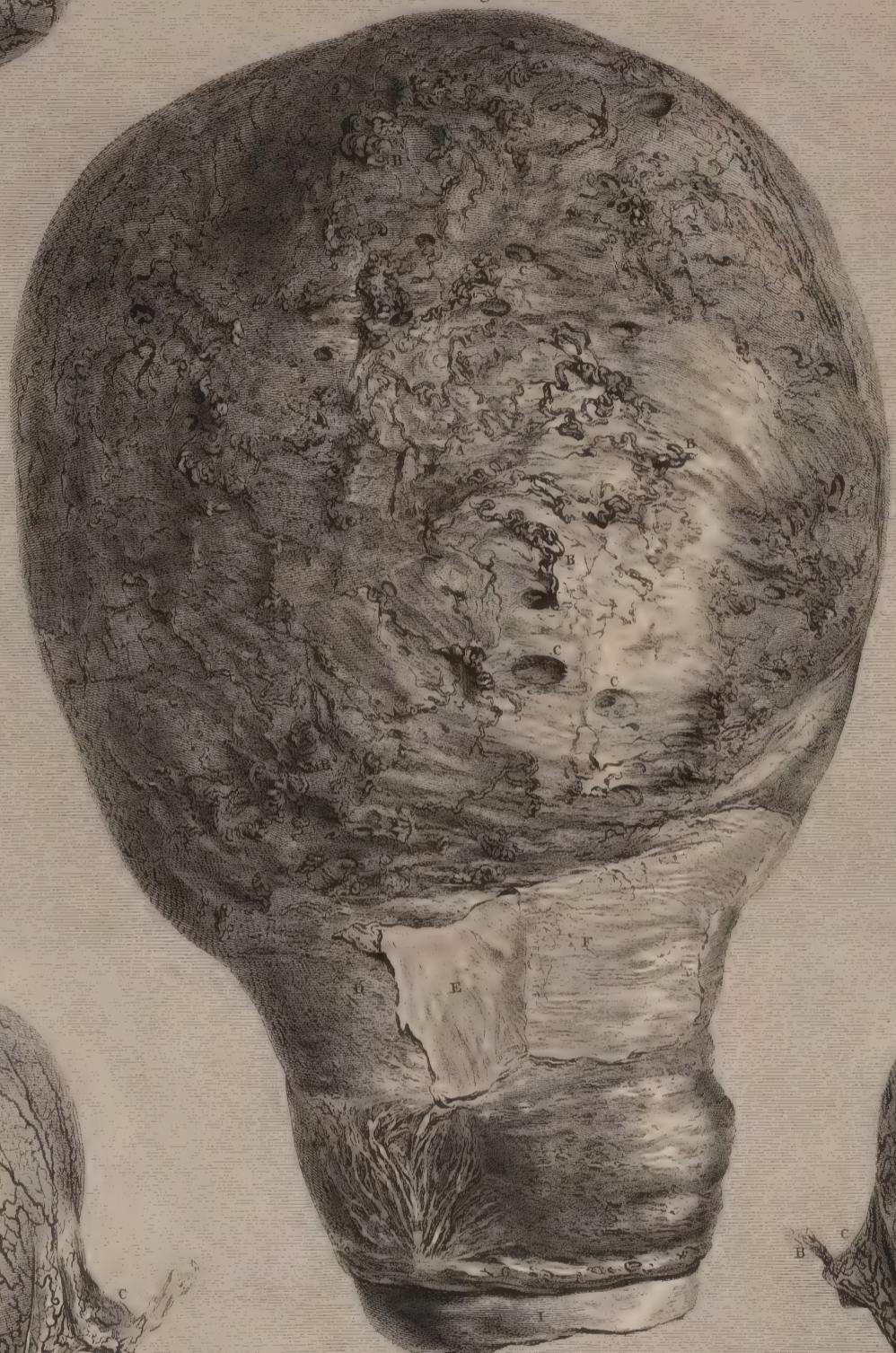


Fig. V.



Fig. II.



Fig. III.



J. T. Rymondi delin.

TAB. XV. ex quinto Cadavere, nono diu gestationis mense. Systema arteriosum Uteri quintuplici figura expressum. Fig. I. Uterus Uteri inveni, quo per invertum loco Placenta adhaeserit. Fig. II. Arterie per partem Uteri anteriorem perreplantatae. Fig. III. Eadem per partem posterioram distributae. Fig. IV. Eadem fundum permundata. Fig. V. Corpus luteum in Ovario per medium divisio, & Pimbriae sube. Fillopianae.

## T A B U L A X V.

**A** Quinto cadavere, nono etiam gestationis mense, sistema arteriosum uteri quintuplici figura expressum.

Mulier haec, post partum neutquam difficilem, in animi deliquum inciderat, causa quidem adstantes latente; horis autem duabus a partu nondum lapsis, illam mors abstulit. Arteriae cera rubri coloris impletæ.

### F I G. I.

- A** Facies uteri inversi, quo præfertim loco placenta adhæserat.
- A** Pars media superficie, cui placenta adhæserat, in fundi parte postica, et paulo ad latus sinistrum sitæ.
- B B** Arteriae convolutæ quamplurimæ, quarum extremitates, quo loco per deciduam ad placentam decurrerant, ruptæ sunt.
- C C** Orificia venarum uteri (vulgo sinus appellata) quæ per deciduam ad placentam decurrerant: haec multo plura quam quæ in figura repræsentantur; minoræ præfertim innumera. Ex venarum illarum cursu, uteri scilicet superficie parallelo, aëre non prius inflato, orificia vix possunt conspicisci. Earum igitur flatu distensarum maxima pars delineatur, nimirum ut umbris infertis, magis conspicuæ evaderent, et cursus etiam earum obliquus, nec non orificia ramorum inter se coëuntium, in conspectum venirent.
- D** Uteri superficie pars cui membranæ adhæserant. Vasa hujus partis, omnia quam minima. Pars etiam ipsa levior, quam ea cui Placenta se immiscerat. Facie deciduae externæ perfectam quandam similitudinem præ se ferebat.
- E** Uteri internæ lamellæ pars, cultro anatomico sublata, et reclinata, ea mente, ut conspicerentur.
- F** Uteri fibrarum fasciculi, quorun maxima pars circulos conficiunt.
- G** Oris uteri dilatati margo, vesiculis glutinosis distinctus.
- H** Cervicis uteri, ad partem posticam, rugæ pennatæ, quæ vulgo valvulæ appellantur.
- I** Vaginæ inversæ pars.

### F I G. II.

Arteriae partem uteri ejusdem anteriorem perreptantes. Uteri facies externa jam siccata fuerat, et inde pellucida adeo facta, ut arteriae in conspectum distincte venirent, pariter ac si in superficie extima disperse fuissent. Uterus hic duodecim fuit pollices longus: unde facile patebit, quantum mole contrahatur in hac figura; quantum etiam in figura tercia et quarta, quæ ad eandem normam delineantur. Pars haec dum arefiebat, in longitudinem quam latitudinem magis distensa fuit; quapropter uterus, in hac, et in figura proxime sequenti, longior est quam ex natura.

- A** Peritonei resepti margo, eo loci, quo, ab utero ad vesicam urinariam refleclitur.
- B B** Tubæ.
- C** Ovarium sinistrum. — **D** Ovarium dextrum. Vid. fig. V.
- E E** Ligamenta rotunda; quorum in sinistro est arteria magna flexuosa, ab ramo spermaticæ, per anastomosin conjunctæ cum hypogastrica, transmisæ: in dextro aliquot sunt minores.
- F** Truncus arteriæ sinistriæ hypogastricæ, ad cervicis uteri latus ascendens.
- G** Truncus arteriæ sinistriæ spermaticæ, in ligamenti lati duplicationem transeuntis.

Arteriarum distributionem in utero explanare haud opus est. Cursus enim earum flexuosi, anastomosique plurimæ, per se satis patent.

### F I G. III.

Eundem exhibet uterum a parte postica visum.

- B B. C. D. E E.** Vid. fig. II. — **F** Arteria hypogastrica dextra.
- G G** Arteria spermatica ad ligamenta lata excurrentes.
- H H** In ea parte uteri cui placenta adhæserat arteriæ flexuose confertæ. Si arterias in hac figura, cum iis in figura præcedenti conferamus, eas multo majores, magisque convolutas esse, in latere eo uteri, cui placenta adhæserat, cernere licebit. In utero gravido, cursus sanguinis maxime in placentam diriguntur.

### F I G. IV.

Fundum exhibet uteri, parte postica sursum versa.

- B B.** Tubæ. — **D** Ovarium sinistrum.
- C** Ovarium dextrum. — **H H** Vid. fig. III.

### F I G. V.

Ovarium dextrum et tuba ejusdem uteri.

- A** Tuba. — **B** Tubæ ligamentum, mesenterio quodammodo respondens.
- C C** Tubæ orificium externum, fimbriis folia referentibus circumdatum.
- D** Fimbriæ a latere utroque orificii tubæ, per ligamentum, ad ovarii extremitatem externam, continuatæ.
- E E** Ovario jam aperto, arteriæ flexuose, per substantiam ejus sparsæ, conspicuntur.
- F F** Hac in parte corpus luteum, per medium divisum, in ovarii substantia cernitur. Nulla conspicuntur vasa in centro, quod colore est albido. Circa centrum illud undique, substantia ejus vasculis abundat.

## P L A T E X V.

**F**IVE figures, from a fifth subject at the full time, to explain the arterial system of the pregnant womb.

This woman, immediately after a natural labour, grew faint, as was said, without an apparent cause; and died within the space of two hours. The arteries were injected with red wax.

### F I G. I.

The womb, inverted.

- A** The centre of the surface to which the placenta had been fixed; which was at the back-part of the fundus, and a little on the left side.
- B B** Innumerable convoluted arteries, with broken extremities, where they had passed through the decidua into the placenta.
- C C C** The orifices of those uterine veins, commonly called sinuses, which had passed through the decidua to the placenta. These orifices were much more numerous than they are represented in this figure. The smaller especially were innumerable. The passage, or direction of these veins, was almost parallel to the surface of the womb; so that their orifices were scarce perceptible, without being inflated. Most of them are represented in that state; both that they may be more distinct, by having a little shade, and that their oblique direction, and the orifices of their communications, or anastomosing branches, may be seen.
- D** Part of the surface of the womb where the membranes had adhered. This was furnished with very small vessels only; and was much smoother than that part to which the placenta had adhered. In every respect it was like the outer surface of the decidua.
- E** Part of the inner lamella of the womb, raised by dissection, and turned to one side, to shew
- F** The fasciculated fibres of the womb, most of which, at this place, were nearly circular.
- G** The border, formed by the dilated mouth of the womb, and studded with gelatinous vesicles.
- H** The branching rugæ commonly called valves, at the posterior part of the neck of the womb.
- I** Part of the inverted vagina.

### F I G. II.

A fore-view of the outside of the same womb, after it was dried, and become so transparent, that the arteries could be seen distinctly, as if they had been dispersed on its outer surface. The object was twelve inches long; from which it will be understood, how much the scale is reduced, in this, as well as in the third and fourth figures, which are delineated to the same proportion. In drying, the preparation was unavoidably more stretched in its length, than in its width; whence in this, and in the following figure, the womb is more oblong, than it is naturally.

- A** The edge of the cut peritoneum, where it was reflected from the womb to the bladder.
- B B** The tubes. — **C** The left ovary.
- D** The right ovary. See fig. V.
- E E** The round ligaments. In the left there is one large serpentine artery, sent down from an anastomosing branch of the spermatic and of the hypogastric: in the right there are several small arteries.
- F** The trunk of the left hypogastric artery, mounting upon the side of the neck of the womb.
- G** The trunk of the left spermatic artery, passing into the duplicature of the broad ligament.

The distribution of the arteries upon the womb requires no explanation. Their serpentine course, and frequent anastomoses are apparent.

### F I G. III.

A back-view of the same subject. B B. C. D. E E. See fig. II.

- F** The right hypogastric artery.
- G G** The spermatic arteries passing into the broad ligaments.
- H H** The crowded serpentine arteries in that part of the womb where the placenta adhered.

By comparing the arteries in this figure, with those in the preceding, we see that they are much larger, and more convoluted, in that side of the womb to which the placenta is fixed; the great current of blood being towards the placenta.

### F I G. IV.

A full view of the fundus of the same womb, the back part being upwards.

- B B** The tubes. — **D** The left ovary.
- C** The right ovary. — **H H** See fig. III.

### F I G. V.

The right ovary and tube of the same womb.

- A** The tube. — **B** The ligament of the tube, analogous to the mesentery.
- C C** The external orifice of the tube, surrounded by foliage-like fimbriæ.
- D** The fimbriæ continued from each side of the orifice of the tube, all along the ligament, between that and the outer end of the ovary.
- E E** The ovary cut open, with serpentine arteries interposed through its substance.
- F F** Here, in the substance of the ovary, the corpus luteum is seen, split through the middle. No vessels appear at its centre, which is of a white complexion; but all around that centre, its substance is very vascular.

## T A B U L A XVI.

**A** Sexto cadavere, octavo mense, uterus a latere dextro visus, atque ita injæcta cera præparatus, et scalpello anatomico denudatus, ut vasorum ad eum accessus, eorumque prime ramificationes quam clarissime apparent. A parte postica, adhuc peritoneo lævi cooperatus est uterus. In parte autem anteriori, qua placenta interne adhærebat, stratum externum uteri substantiæ cultro anatomico sublatum fuit.

**AA** Cervicis uteri, nullo modo dilatati, facies exterior. Os uteri literæ inferiori *A* oppositum; ab qua parte deorsum, pars vaginalæ, adipe tecæ, relinquitur.

**BB** In uteri superficie strictura, ubi margine pelvis antea fuit circumdatus.

**CC** Tuba; post quam ovarium oblitescerat.

**DD** Ligamentum rotundum, cultro anatomico dissectum; nimurum ut vena, ex parte inferiore tortuosa, binæque arteriæ convolute, ex vasis spermaticis omnes ortum ducentes, in conspectum venirent.

**E** Arteria hypogastrica.

**F** Vena hypogastrica.

Vasa hæc ramos quam plurimos ad vaginalam dimittunt, et per latus uteri ascendunt, nimurum ut per anastomosin cum spermaticis suis propriae cœant. Partem utriusque trunci, administratione infusoria necessario destruetam, ingenium pictoris supplevit.

**G** Arteria spermatica.

**H** Vena spermatica.

Vasa hæc dum ad uterum accidunt, ramos quam plurimos, anterius ad tubam, et retrosum ad ovarium mittunt; deinde, ad uteri latus adventantia, per anastomosin cum hypogastricis cœunt. Rami præcipui utriusque, hic, ad fundi uteri partem anteriorem, cui placenta adhærebat, cursum tenent.

**II** Peritonei, posticam uteri superficiem tegentis, margo.

## P L A T E XVI.

*FROM a sixth subject, at eight months. A full view, from the right side, of the womb, so injected and dissected, as to shew the approach, and first general branchings of the uterine vessels. The back-part of the womb is still covered by the smooth peritoneum; but at the fore-part, to which the placenta adhered internally, the outer stratum of the substance of the womb was removed by dissection.*

**AA** The outside of the neck of the womb, which was not in the least dilated. The os uteri was opposite to the lower letter *A*; from which downwards, there is a part of the vagina left, covered with fat.

**BB** A striæture on the womb, where it was surrounded by the brim of the pelvis.

**CC** The tube; behind which the ovary lay concealed.

**DD** The round ligament dissected, to shew a vein in its middle (twisted at the inferior part) and two convoluted arteries: all from the spermatic vessels.

**E** The hypogastric artery.

**F** The hypogastric vein.

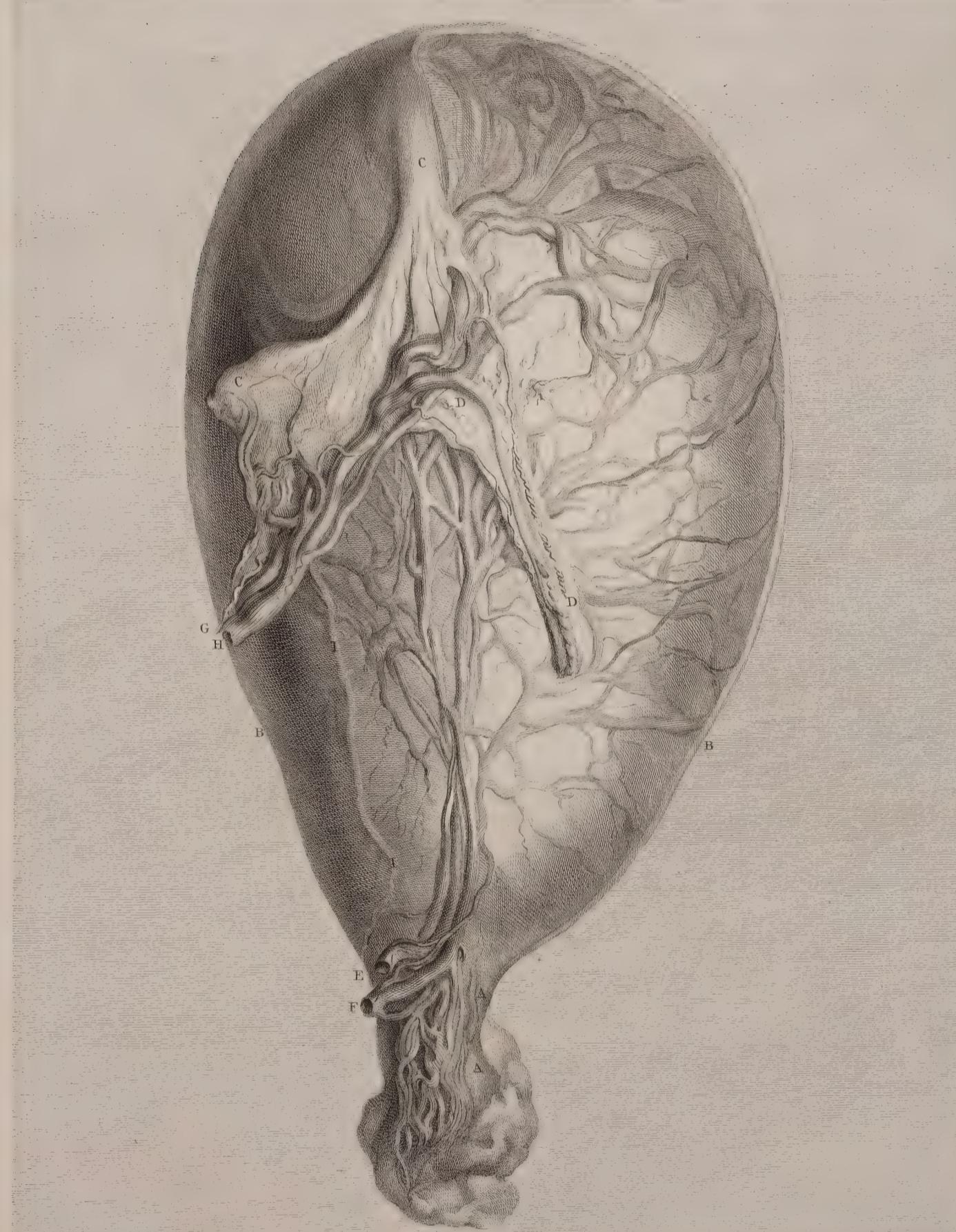
These vessels send down numerous branches to the vagina, and mount upon the side of the womb, to anastomose with the respective spermatics. By fixing pipes, for the injection, and tying up these vessels, a part of each trunk was lost, and then supplied by fancy.

**G** The spermatic artery.

**H** The spermatic vein.

These vessels, in their approach to the womb, send up numerous branches, forwards to the tube, and backwards to the ovary; then, passing to the side of the fundus uteri, they anastomose with the hypogastric. The principal branches of both, in this case, go to the fore-part of the fundus uteri, where the placenta was attached.

**II** The edge of the peritoneum which covers the posterior surface of the womb.



Edwards delin'

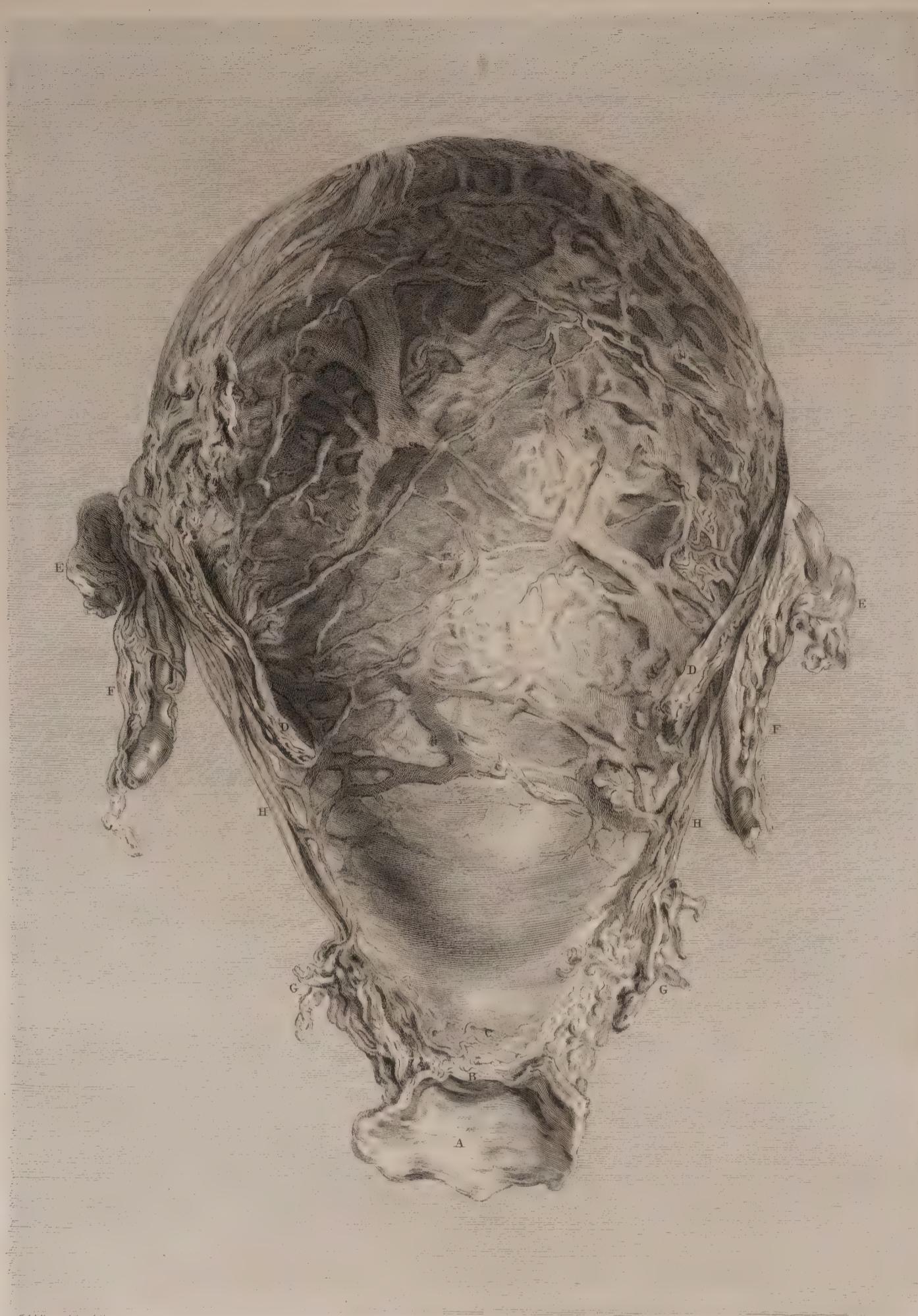
Michell Sculp'

TA B. XVI. I. sarto cadavere, octavo mense. Alteras a latere dextra visa, atque ita  
infecta cerei preparatus, et scaphello anatomico denudatus, ut vasorum ad eum accipiatur,  
et cumque primae ramificationes quam clarissime apparant.

Pub: Nov: 15: 1774, by Dr. Hunter.







TAB. XVII. Idem Uterus a fronte. Primo sive extimo substantiæ strato sublato, vasorum ampliorum distributio, coramque versus Placentum (qua hic parti anteriori et fundo Uteri adhaeret) progressus melius conspicuntur.

## T A B U L A XVII.

**I** DEM uterus a fronte. Primo, sive extimo substantiae strato sublato, vasorum distributio majorum, corumque versus placentam (quae hic parti anteriori et fundo uteri adhaerebat) progressus, melius conspicuntur.

- A* Vaginæ extremitas summa, incisione aperta.
- B* Uteri orificium contractum.
- C* Uteri cervix nondum dilatata.
- DD* Ligamenta rotunda.
- EE* Tubæ: ovariis pone absconditis.
- FF* Fasciculus vasorum spermaticorum, ad latus uteri ascendentium.
- GG* Fasciculus vasorum hypogastricorum, ad latus cervicis uteri accendentium.
- HH* Trunci vasorum spermaticorum et hypogastricorum, ex anastomosi communes, ad uteri latera decurrentium. In fundi parte anteriori, arteriæ et venæ, cursum versus placentam tenentes, conspicuntur: vasa minora, rotundiora, magisque convoluta, arteriæ sunt; majora, et planiora, venæ.

## P L A T E XVII.

**F**ROM the same subject. A direct fore-view of the womb, after the outer stratum of its substance had been dissected off, to shew the distribution of the larger uterine vessels in their way to the placenta; which, in this case, adhered to the fore-part and fundus of the womb.

- A* The upper extremity of the vagina laid open.
- B* The orifice of the womb, contracted.
- C* The neck of the womb, not stretched.
- DD* The round ligaments.
- EE* The tubes: the ovaries being concealed behind them.
- FF* The group of spermatic vessels, mounting up towards the sides of the fundus of the womb.
- GG* The group of hypogastric vessels, coming to the side of the neck of the womb.
- HH* The common, or anastomosing trunks of the spermatic and hypogastric vessels, running along the sides of the womb. On all the fore-part of the fundus are seen the arteries and veins, passing towards the placenta: the smaller, rounder, and convoluted vessels are the arteries; the larger and flattened vessels are the veins.

## T A B U L A X V I I I .

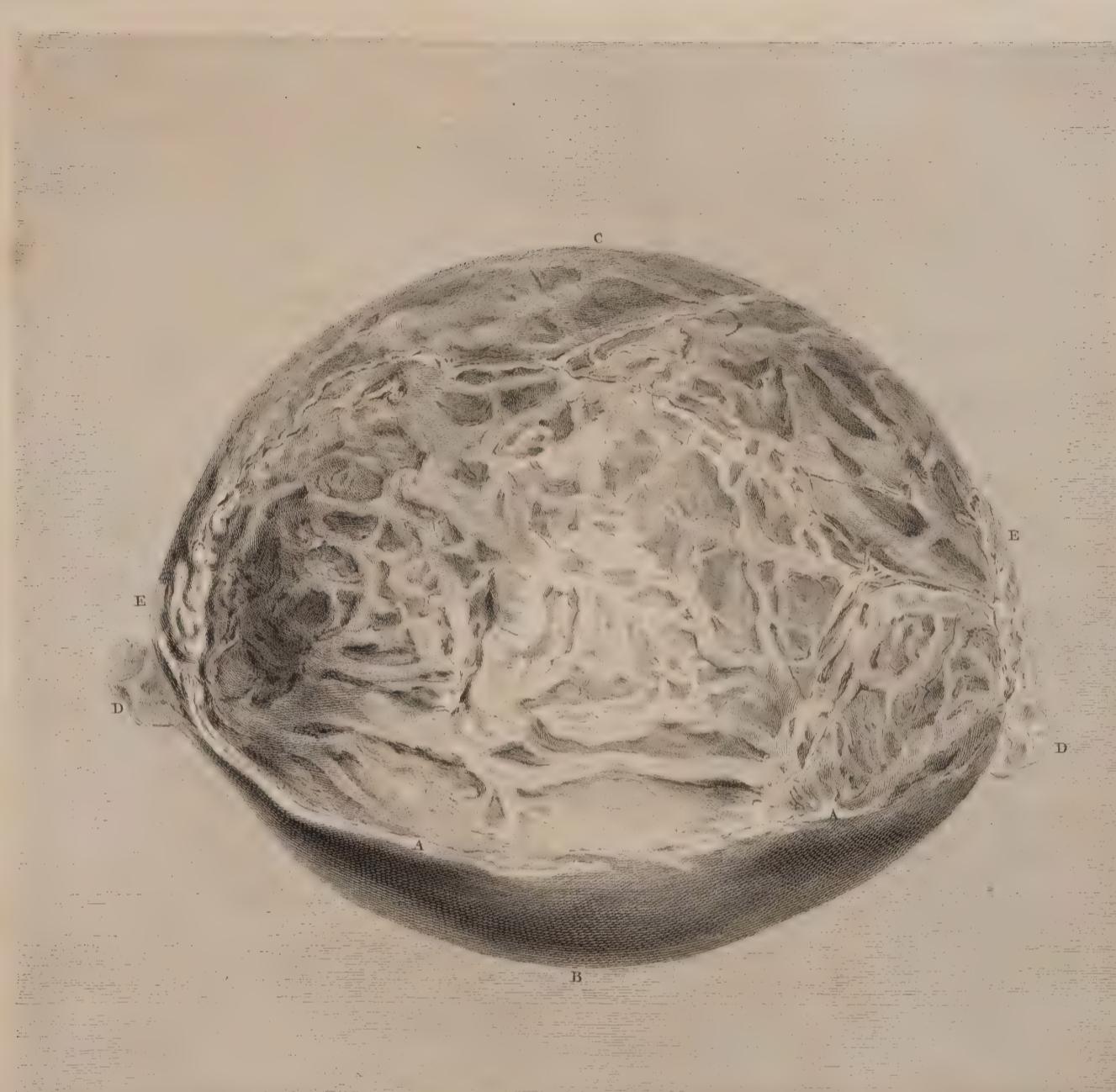
**E**JUSDEM uteri fundus, eodem modo præparatus, ut am-  
plissimorum vasorum, venarum præsertim, placentæ ex ad-  
verso objectarum, crebræ inter se commissuræ contemplandæ  
prostarent.

**A A** Sectio per fundum uteri transverse ducta; inter  
**A A B** Uteri parietem posteriorem, in statu suo naturali, (scilicet, pe-  
ritoneo lœvi cooperatum) et  
**A A C** Uteri parietem anteriorem, ubi stratum substantiæ ejus exti-  
mum sublatum est, ut vasa, ex adverso placentæ sita, conspici  
possent. Vasa majora et planiora, ut in figura præcedenti, venæ  
funt.  
**D D** Tubæ. Post, fine infra eas, ovaria istiusmodi situm habebant,  
qui illa conspici non fineret.  
**E E** Ligamenta rotunda, deorsum, paulo ante tubas, cursum te-  
nentia.  
In hoc cadavere, uteri paries anterior posteriori tumidior fuit;  
ita ut si uterus a vertice deorsum per tubas transscissus fuisset,  
pars anterior, altera major extitisset. Re vera tamen, inter eas  
discrimen haud tantum fuit, quantum in hac tabula videtur;  
quippe uterus, paulo oblique oculo se offerens, plus superficie  
anterioris, quam posterioris, exhibebat.

## P L A T E X V I I I .

**F**ROM the same subject. The very fundus, or upper part of the  
womb, which was previously dissected to shew in the preceding figure  
as well as in this, the plexus of large vessels, especially the veins, op-  
posite to the placenta.

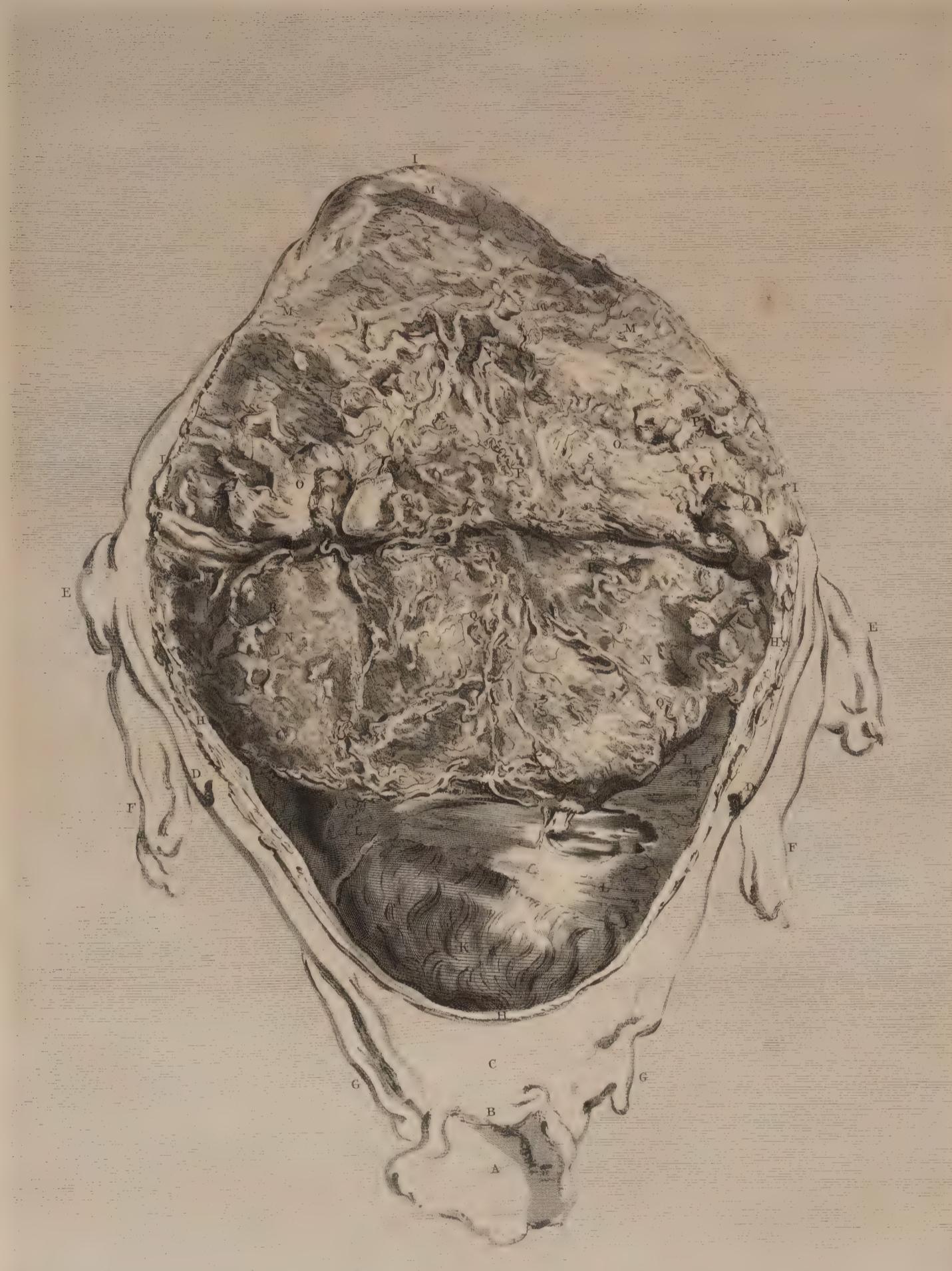
**A A** The transverse section across the fundus of the womb, between  
**A A B** The posterior side of the womb left in its natural state; that is, cov-  
ered with the smooth peritoneum, and  
**A A C** The anterior side of the womb at its fundus, the outer stratum of  
its substance being removed, to shew the vessels opposite to the placenta.  
The larger and more flattened vessels, as in the preceding figure, are  
veins.  
**D D** The tubes. The ovaries lay behind; that is, below them in this atti-  
tude, and farther from the eye of the spectator, so as to be hidden.  
**E E** The round ligaments, going downwards, a little before the tubes.  
In this case, the anterior side of the womb made a greater swelling,  
or was more stretched than the posterior; so that if the womb had been  
vertically cut down through the two tubes, the anterior portion would have  
been larger than the other. Yet the difference was not so considerable, as  
may be imagined from a view of this figure, because the object was  
placed a little obliquely to the eye, which thence took in more of the an-  
terior, than of the posterior surface.



J. A. Rymsdyk delin.  
TAB. XVIII. Quidam Uteri Fundus, eodem modo preparatus, ut amplissimorum vasorum.  
Venarum praeerit. Placentar ex adverso objectarum, frequentes inter se commissuras  
contemplanda protarent.







*J. Van Reemsdyk delin.*

*TAB. XIX. Idem Uterus, ejus facie anteriori incisa et in fundum revoluta illasi secundinis, per quas caput Partus, obscurius habet, videtur. Hic igitur visui sero offert cum Superficies externa Placentae sed dimidiata, tum pars superficie interiore uteri, ei respondens, una cum rasis que inter Uterum et Placentam intercedunt. Partes Uteri anteriores, solis linearum ductibus expressiv sunt.*

*J. Fougeron Sculp.*

## T A B U L A XIX.

**I** DEM uterus; ejus facie anteriori incisa et in fundum revo-  
luta, illæfis secundis, per quas caput fœtus, obscurius licet,  
cernitur. Hic igitur visui fœsi offert cum superficies externa placen-  
tæ, dimidiatae quidem, tum pars superficie internæ uteri, ei  
respondens, una cum vasis quæ inter uterum et placentam inter-  
cedunt. Partes uteri exteriæ lineis solummodo expressæ sunt.

- A** Vaginae extremitas superior incisione aperta.
- B** Uteri orificium contractum.
- C** Uteri cervix nondum dilatata.
- DD** Ligamenta rotunda.
- EE** Tubæ; ovaria, pone iis sita, oculum fugiunt.
- FF** Vasa spermatica.
- GG** Vasa hypogastrica.
- HHH** Uteri substantia incisa.
- III** Uteri paries anterior a secundis separatus, et supra fundum uteri reflexus.
- K** Chorion, amnion tegens. Per membranas illas pellucidas fœtus caput conspicitur.
- LLL** Decidua, qua uteri parieti intimo adhærebat. Vasa quædam parva, in eam ex utero transmissa, conspicuntur.
- MMM** Uteri superficies interna, parti huic deciduae respondens.
- NN** Superficies externa partis illius placentæ quæ ab utero avulsa fuit.
- OO** Superficies uteri interior huic respondens.
- PP** In uteri superficie interna arteriæ convolutæ, quæ ad placentam antea transferant, jam vero diruptæ, dum uterus a placenta separabatur.
- QQ** Arteriæ in placentæ superficie illis respondentes.
- RR** Venæ ex placentæ substantia excurrentes; in ea scilicet parte superficie ejus diruptæ, qua ad uterum transfabant.
- SS** Venæ in facie uteri interna, venis proxime dictis respondentes.
- T** In angulo, superficiem externam placentæ inter et superficiem internam inversam uteri, arteria convoluta, ab utero in placentam continuata, conspicitur.
- V** Vena, arteriam proxime dictam juxta positâ, et illi respondens, ex placenta in uterum continuata.

## P L A T E XIX.

**F**ROM the same subject. A fore-view of the womb. Its substance is cut through and turned up over the fundus, to shew a part of the membranes, through which the child's head is obscurely seen, and about half of the placenta; together with the corresponding internal surface of the womb, and the vessels passing between the womb and the placenta. The external parts of the womb are represented in out-lines only.

- A** The upper extremity of the vagina laid open.
- B** The orifice of the womb, contracted.
- C** The neck of the womb, not stretched.
- DD** The round ligaments.
- EE** The tubes; the ovaries concealed behind them.
- FF** The spermatic vessels.
- GG** The hypogastric vessels.
- HHH** The substance of the womb, cut through.
- III** The fore-part of the womb raised up from the secundines, and turned over the fundus.
- K** The chorion covering the amnion; through which transparent membranes the child's head is seen.
- LLL** The decidua where it adhered to the inner surface of the womb, in which are seen some small vessels sent into it from the womb.
- MMM** The corresponding inner surface of the womb.
- NN** The outer surface of that part of the placenta from which the womb was separated.
- OO** The corresponding internal surface of the womb.
- PP** Convoluted arteries upon the inner surface of the womb, which had passed to the placenta, and were broken through in separating the womb.
- QQ** The corresponding arteries on the surface of the placenta.
- RR** Veins emerging from the substance of the placenta, and broken through at its surface, where they were passing into the womb.
- SS** The corresponding veins on the inside of the womb.
- T** In the angle between the outer surface of the placenta, and the inverted inner surface of the womb, is here seen a convoluted artery, continued from the womb into the placenta.
- V** A corresponding vein, near that artery, continued from the placenta to the womb.

## T A B U L A XX.

**I**DEM denuo uterus, sed omnino apertus, ut foetum in situ naturali ostendat. Circa fundum quaquaerius substantia tam placentæ quam uteri incisa conspicitur.

Uteri partes exteriores, lineis leviter adumbratae, eadem sunt, quæ in præcedenti figura, et in tabula decima septima ad plenum sunt expressæ.

**AAA** Utero per medium diviso, dimidii inferioris substantiæ sectio, ad eam partem scilicet qua membranæ adhærebant.

**BBB** Uteri dimidii superioris substantiæ sectio, ad partem qua placenta adhærebat.

**CCC** Placente sectio; illius cava spongiosa cera flava, ex uteri arteriis, et cera rubra, ex venis impleta sunt.

**DDD** Gyri nonulli funis umbilicalis, brachia inter et crura foetus positi.

**EE** Sectioni uteri superimposita funis umbilicalis extremitas, ad partem illam placentæ, quæ foetum præjacebat, excisa.

Foetus iconem explanare supervacaneum foret.

## P L A T E XX.

**F**ROM the same subject. A fore-view of the womb, fully opened, to shew the child in its natural situation. All around, at the fundus, the substance of the placenta, as well as that of the womb itself, is seen cut through.

The external parts of the womb, slightly sketched in out-lines, are the same as in the preceding plate, and were fully expressed in plate XVII.

**AAA** The section of the substance of the lower half of the womb, where the membranous part of the secundines adhered.

**BBB** The section of the substance of the upper part of the womb, where the placenta adhered.

**CCC** The section of the placenta: the spongy cavities of which contained both some of the yellow wax, from the arteries of the womb, and of the red wax, from the veins.

**DDD** Some turns of the navel-string, lying between the arms and the legs of the child.

**EE** The end of the navel-string laid over the section of the womb. It was cut off from its attachment at that part of the placenta which lay before the child.

The parts of the child require no explanation.



J. J. Kynodike delin.

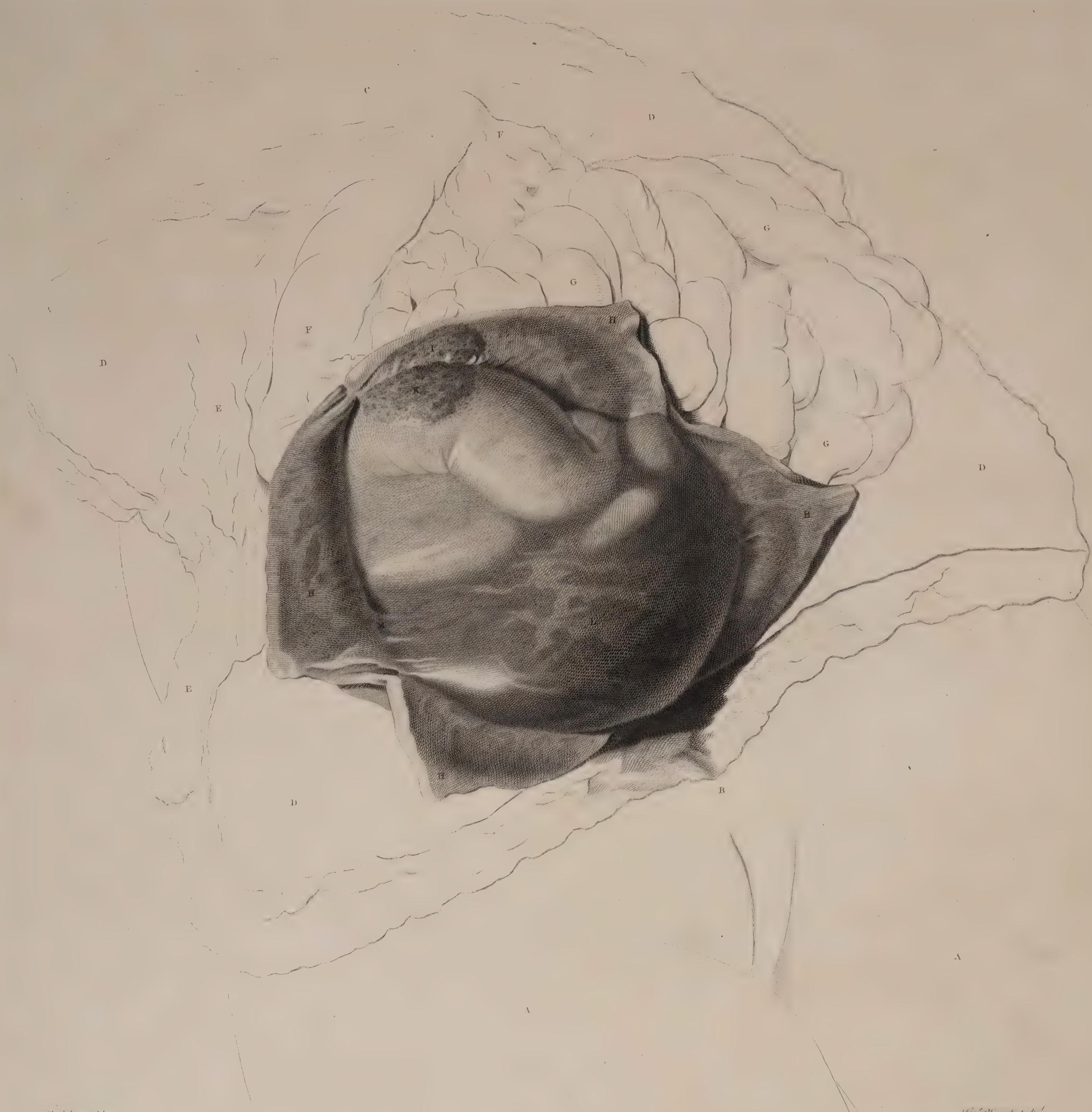
H. Breyer Sculps.

TABLE XX. Idem denuo Uterus, sed omnino aperiens, ut Fœtum in situ  
naturali ostendat. Circa Fundum quaqueversus substantia, tam  
Placenta quam Uteri, invisa conspicitur.

Pub: Nov: 15. 1774, by Dr. Hunter.







Abra'icens delin.

Fra. William Sculp.

TAB. XXI. / Septimo cadavere, Septimo graviditatis mense. / Operto cruciformi incisione Utero, & reclinatis rite cornibus,  
per membranas / solum continentibus / Solutus ipse aqua immutans conspicitur. Reliquae partes nudis lineis distinctae sunt.

## T A B U L A   X X I.

**A** Septimo cadavere, septimo graviditatis mense. Aperto cruciformi incisione utero, et reclinatis rite cornibus, per membranas fœtum continentis, fœtus ipse aquis innatans conspicitur. Reliquæ partes nudis lineis distinctæ sunt.

- AA** Femora.
- B** Mons veneris, ad partem qua abdominis incisio longitudinalis definit.
- C** Scrobiculus cordis, qua abdominis incisio incipit.
- DDDD** Partium continentium abdominis anguli quatuor reflexi, ut viscera plene paterent.
- EE** Omentum, in latere dextro abdominis.
- FF** Colon, ad latus sinistrum abdominis transiens.
- GGG** Intestina tenuia, uteri latus sinistrum versus, quorum gyri non nulli, tempore quo cadaver primo apertum fuit, ante uterum jacebant.
- HHHH** Uteri, cruciformi incisione aperti, anguli quatuor, a secundis subitus positis liberati et reflexi, ut contenta ejus in conspectum prodirent.
- I** Uteri superficie intimæ pars exigua, cui placenta adhæserat, minus quidem complanata, magis autem sanguine imbuta quam pars illa quæ membranis vestita fuerat.
- K** Lobi parvi placentæ superficies parti proxime dictæ respondens.
- L** Membrane liquorum amnii continentis, quæ ad partem uteri inferiorem, propter cadaveris declivem situm, fœtus partes superiores e conspectu fere tollunt; ad fundum autem uteri subfidentes, fœtus partes satis distinctæ in conspectu locant.
- M** In hoc angulo, uterum inter et secundas, pector id exprimere voluit, quod in cadavere satis manifestum fuit, scilicet, uteri et secundarum substantiam inter se mutuo continuatam: dum autem hanc partem separabamus, tenera illa interneclens membrana, decidua, in duas lamellas abiit; quarum hæc utero, illa chorio adhærebat.

## P L A T E   X X I.

**F**ROM a seventh subject, at seven months. The womb opened by a crucial incision, and the four corners carefully separated, and turned aside from the secundines, so as to shew the child, and waters, through the enclosing membranes.

The adjacent parts of the subject are represented in out-lines.

- AA** The thighs.
- B** The mons veneris, where the longitudinal incision of the abdomen terminates.
- C** The pit of the stomach, where the longitudinal incision of the abdomen begins.
- DDDD** The four angles of the containing parts of the abdomen, inverted, to expose the bowels.
- EE** The omentum, in the right side of the abdomen.
- FF** The colon passing towards the left side of the abdomen.
- GGG** The small intestines on the left side of the womb; some turns of which, when the body was first opened, lay before the womb.
- HHHH** The four angles of the womb, (which was opened by a crucial incision) separated from the subjacent secundines, and inverted, to expose the contents.
- I** A small part of the inner surface of the womb to which the placenta had adhered, more unequal and more bloody than what had been lined by the membranes.
- K** The corresponding surface of a small lobe, or extremity of the placenta.
- L** The membranes containing the liquor amnii, which, at the lower part of the womb, from the declivity of the object, cover the upper parts of the child from our view; and towards the fundus uteri collapse so as to shew the parts of the fœtus not indistinctly.
- M** In this angle between the womb and secundines, the artist endeavoured to express what was very apparent in the object, viz. the continuity of the substance of the womb and of the secundines; in parting which, the tender connecting medium, the decidua, separated into two layers, one of which clung to the womb, and the other to the chorion.

## T A B U L A XXII.

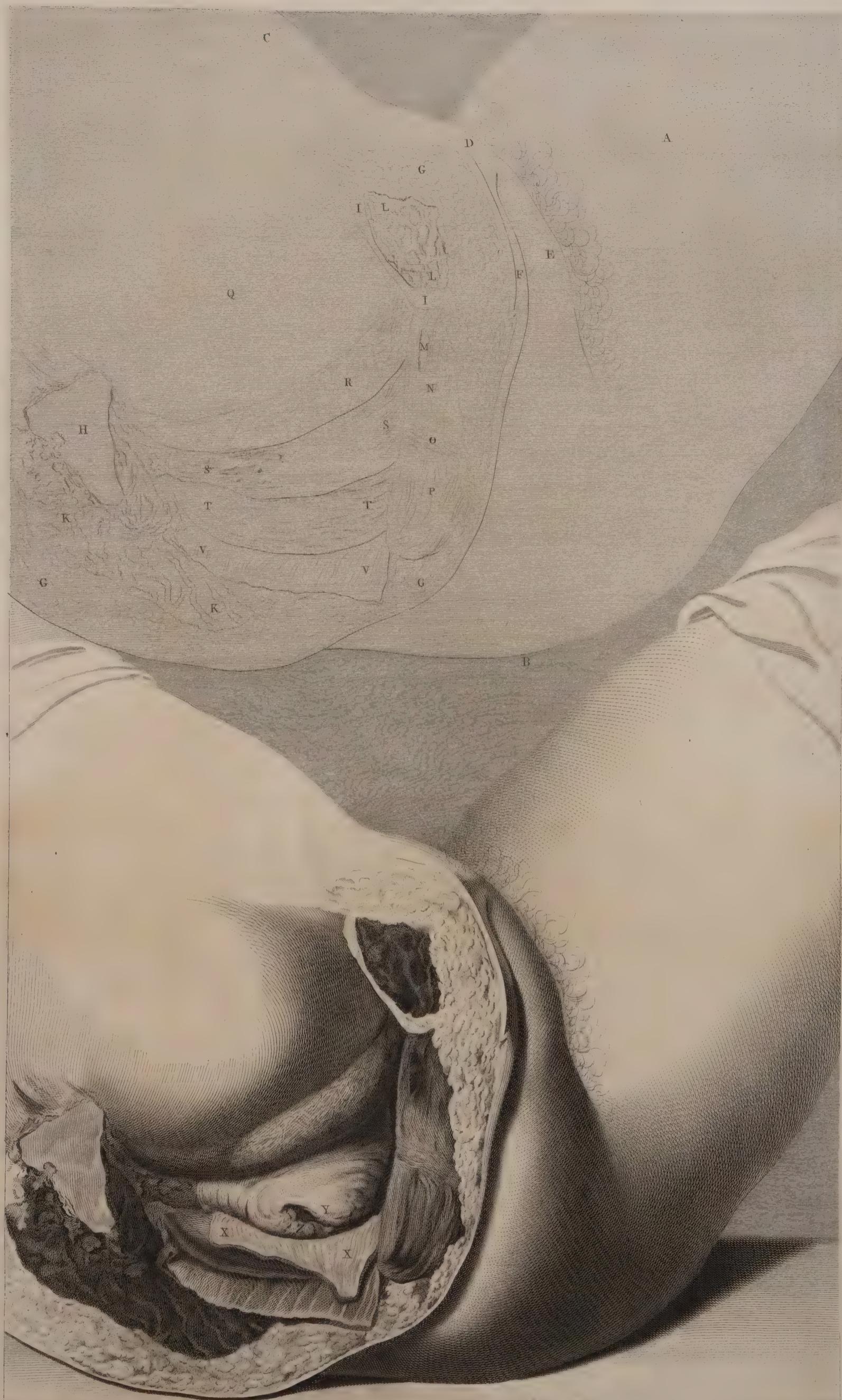
**I**DEM cadaver. Contenta pelvis, quo situ disposita sunt, ex duplice patet figura: in altera, lineis nudis expressa, vaginam integrum vides; in altera, magis elaborata, dextro vaginæ latere dissecata et devoluta, os uteri in conspectum prodit.

- A* Femoris sinistri facies interna.
- B* Nates sinistrae.
- C* Abdominis pars anterior.
- D* Mons veneris.
- E* Labium sinistrum.
- F* Labii dextri pars.
- GGG* Cutis et membranæ adiposæ sectio, eo confilio facta, ut in latere dextro, partes continentis pelvis removerentur.
- H* Ossis sacri superficies cartilaginea, qua ossi ilium dextro commissa fuerat.
- II* Os Pubis dextrum, prope symphysin, transverse scissum.
- KK* In pelvis parte postica, musculi externi secti.
- LL* Musculi in facie ossis pubis externa etiam secti.
- M* Clitoridis crus dextrum, ubi ischio, quod hic sublatum est, connectebatur.
- N* Vaginæ sphincter.
- O* Musculus transversalis perinæi.
- P* Ani sphincter.
- Q* Tumor ex utero in cavi pelvis parte superiori.
- R* Vesica urinaria, fere vacua, parte anteriori uteri et latere superiori vaginæ compresa.  
Literæ sequentes ad lineas adumbratas spectant.
- SS* Vaginæ facies externa situ suo naturali vesicam urinariam inter et
- TT* Rectum.
- VV* Musculi, levator ani scilicet et coccygeus lateris dextri, cultro anatomico a pelvis contentis separati, et in superficiem recisam devoluti.  
Literæ sequentes ad figuram magis elaboratam spectant.
- XX* Totius vaginæ substantia ex uteri cervice et vesica urinaria excisa et in rectum devoluta, ut os uteri in conspectum prodiret.
- Y* Oris uteri labium anterius.
- Z* Ejusdem labium posterius.  
Vagina ad hunc modum aperta, os uteri, nimis minuciose suo jam a latere sublatu, dextrorum propendebat.

## P L A T E XXII.

**F**ROM the same subject, shewing the situation of the contents of the pelvis. In the figure which is expressed by out-lines, the vagina is whole; but in the more finished figure, its right side is cut out, and turned down to shew the mouth of the womb.

- A* The inside of the left thigh.
- B* The left nates.
- C* The anterior part of the abdomen.
- D* The mons veneris.
- E* The left labium.
- F* Part of the right labium.
- GGG* The section of the skin and adipose substance, which was made to remove the containing parts, on the right side of the pelvis.
- H* The cartilaginous surface of the sacrum, by which it was joined to the right os ilium.
- II* The right os pubis, cut through near the symphysis.
- KK* The external muscles, on the back part of the pelvis, cut through.
- LL* The muscles which lie on the outside of the os pubis, cut through.
- M* The right crus clitoridis, where it was fixed to the ischium, which is removed.
- N* The sphincter vaginæ.
- O* The transverse muscle of the perineum.
- P* The sphincter ani.
- Q* The swelling formed by the womb, in the upper part of the cavity of the pelvis.
- R* The bladder, almost empty, compressed between the anterior part of the womb and the upper side of the vagina.  
The following letters refer only to the figure of out-lines, viz.
- SS* The outside of the vagina in its natural situation between the bladder and rectum.
- TT* The rectum.
- VV* The levator ani and coccygeus muscles of the right side, by dissection turned down from the contents of the pelvis over the cut surface.  
The following letters relate only to the more finished figure, viz.
- XX* The whole substance of the vagina, in the right side, cut from the neck of the womb and bladder, and turned down over the rectum, to shew the orifice of the womb.
- Y* The anterior lip of the orifice.
- Z* The posterior lip of the same.  
When the vagina was thus opened, the lateral support being removed, the os uteri pushed out towards the right side.



*Blakesley delin.* *Finz illio met. sculp.*  
TAB. XXII. *Sidem Cadaver. Contenta Pelvis, quo situ disposita sunt, ex duplice patet figura.*  
*In illa elaboratori, dextra Vagina latere dissecata & devoluta, & illi in prospectum prævidit.* -  
*Pub. Nov: 15. 1774, by Dr. Hunter.*





ad idem utrum, cibarium, sanguiniferum; sanguineum et sanguiferum.

TAB. XXXIII. Ad idem (ad idem), sanguis (sanguis) sanguis, lumen ad idem sanguis.

lumen ad

ad idem



## T A B U L A XXIII.

**O**CTAVUM cadaver, sexto gestationis mense. Uteri ac membranarum parte anteriori sublata, exhibetur fœtus cum parte placentæ et funiculi umbilicalis. Uteri vasa cera impleta fuerant.

- A** Vesica urinaria, respectu habito ad uterum, in situ suo naturali; modice distenditur, et ramis quibusdam majoribus venarum hypogastricarum circumtegitur.
- B** Vaginae partis posticæ facies interna.
- CC** Vasa hypogastrica ad cervicem uteri decurrentia et ramos ad vesicam urinariam et vaginam transmittentia.
- DD** Vasa spermatica, duplicationem ligamenti lati intrantia.
- EE** Tubæ.
- FF** Fimbriæ.
- GG** Ligamenti lati lamella posterior: anterior cultro anatomico sublata fuerat, ut vasa spermatica, ad fundum uteri ascendentia, oculo plenius occurserent.
- HH** Ligamenta rotunda. In sinistro, arteria præcipua, convoluta, a spermatica descendens conspicitur.
- III** Uteri substantiae totius et membranarum seccio, qua uteri et secundarum paries anterior, ad eorum contenta exhibenda, sublatus fuerat.
- K** Funis umbilicalis, prope locum ubi in placenta definit.

Placenta uteri parti posticæ, versus fundum, adhærebat. Funis umbilicalis, primo deorsum, super humerum sinistrum, deinde fursum, pone corpus infantis, ad finem suum in placenta transfibat.

## P L A T E XXIII.

**F**ROM the eighth subject, at six months. A fore-view of the womb, which was injected; the anterior part, both of the womb and of the membranes, having been cut away, and the liquor amnii taken out to shew the fœtus, with a part of the placenta and of the navel-string.

- A** The bladder, in its situation with respect to the womb. It is moderately distended, and is covered with some large branches of the hypogastric veins.
- B** The inside of the posterior part of the vagina.
- CC** The hypogastric vessels, going into the neck of the womb, and sending branches to the bladder and vagina.
- DD** The spermatic vessels, going into the duplication of the broad ligament.
- EE** The tubes.
- FF** The fimbriæ.
- GG** The posterior lamella of the broad ligament: the anterior had been removed by dissection, to give a clearer view of the spermatic vessels, in their ascent to the fundus of the womb.
- HH** The round ligaments. In the left is seen a large convoluted artery, coming down from the spermatic.
- III** The section of the whole substance of the womb, and of the membranes, by which the forepart of the womb and of the secundines was removed, to expose their contents.
- K** The navel-string, near its termination in the placenta.

The placenta adhered to the posterior part of the womb, towards the fundus. The navel-string passed first downwards, over the left shoulder, and then upwards, behind the body of the child, to its termination at the placenta.

## T A B U L A XXIV.

A B codem cadavere.

### F I G. I.

Placenta uteri fundo et parti posticæ adhærescens; substantia ejus spongiosa, injecta per vasa uterina cera, turgescit.

Pleraque partes lineis adumbratæ, in tabula præcedenti ad plenum fuit expositæ.

- A Vesica urinaria.
- B Vagina.
- CC Vasa hypogastrica.
- DD Vasa spermatica.
- EE Tube.
- FF Fimbriæ.
- GG Ligamenta lata.
- HH Ligamenta rotunda.
- III Uteri et membranarum sectio.
- K Funis umbilicalis.
- LL Placenta utero adhærescens.

Nulla pars ceræ, in vasa uterina injectæ, ad ramos vasorum ilorum quæ funem umbilicalem conficiunt, transferat; vasa illa fanguinem solummodo continentia, obscure designata erant, ubi ex fune umbilicali in faciem internam placentæ se immitabant. Cellulæ autem in placentæ parte spongiosa, omnes eodem modo cera, vel cœrulea in venas uteri injecta, vel rubra in arterias infusa, turgescabant. Hanc rem indicat figura secunda.

M Membranæ ex margine placentæ exeentes, et uterum undique investientes.

Placentæ margo hic paulo elatior est, et magis conspicuus, substantia ejus spongiosa cera distensa.

### F I G. II.

Portio aliqua placentæ transverse secta, ut substantia ejus spongiosa appareret, ejusdemque cera adimplæta crassitudo.

- A Placentæ superficies interna.
- B Placentæ superficies externa.
- C Membranarum portiuncta, ex margine placentæ, cera injecta turgescens, et in figuram rotundiorem aductæ, exiens.

Ceræ cœruleæ, primum per venas uteri injectæ, maxima pars ad superficiem ejus internam propulsâ fuerat; ceraque rubra, postea per arterias injecta, in partibus exterioribus restabat; per totam autem ejus substantiam, colores hi duo plus minusve commixti fuit.

### F I G. III.

Arterias exhibet illius partis membranæ deciduae, quæ parietem uteri anteriorem investiverat.

### F I G. IV.

Venæ ejusdem partis deciduae.

Figuræ hæ duæ separatim, aliqua ne fieret confusio, delineatae fuit.

## P L A T E XXIV.

FROM the same subject.

### F I G. I.

The placenta, adhering to the fundus and back-part of the womb: its spongy substance is filled by the injection of the uterine vessels.

Most of the parts in out-lines were more fully represented and explained in the preceding plate.

- A The urinary bladder.
- B The vagina.
- CC The hypogastric vessels.
- DD The spermatic vessels.
- EE The tubes.
- FF The fimbriæ.
- GG The broad ligaments.
- HH The round ligaments.
- III The section of the womb and membranes.
- K The navel-string.
- LL The placenta, adhering to the womb.

None of the wax, injected into the vessels of the womb, had passed into the branches of those vessels which compose the navel-string; and as they contained only some blood, they were not distinctly marked, where they spread, from the navel-string, over the internal surface of the placenta. But the cells, or interstices in the spongy part of the placenta, were universally loaded with wax; either the blue, which was injected into the veins of the womb, or the red, which was thrown into the arteries. This is illustrated by Fig. II.

M The membranes, coming out from the edge of the placenta, and investing the womb all around.

The edge of the placenta, in this case, was much more elevated and distinct, its spongy substance being distended.

### F I G. II.

A section of half of the placenta, principally to shew what thickness it had acquired, by its spongy cavities being filled with wax.

- A Its internal surface.
- B Its external surface.
- C A small portion of the membranes, going off from the edge of the placenta, which was thickened, and rounded, by the injected wax.

Most of the blue wax, which was first injected by the veins of the womb, was driven on towards the internal surface; and the red wax, which was afterwards injected by the arteries, was lodged principally in the outer parts; but the two colours were, more or less, blended through the whole.

### F I G. III.

The decidua, from the fore-part of the same womb, with the convoluted uterine arteries, which are dispersed through it.

### F I G. IV.

The same part of the decidua, with the uterine veins, which ramify through it.

These two figures were drawn separately, to avoid confusion.

Fig. I.

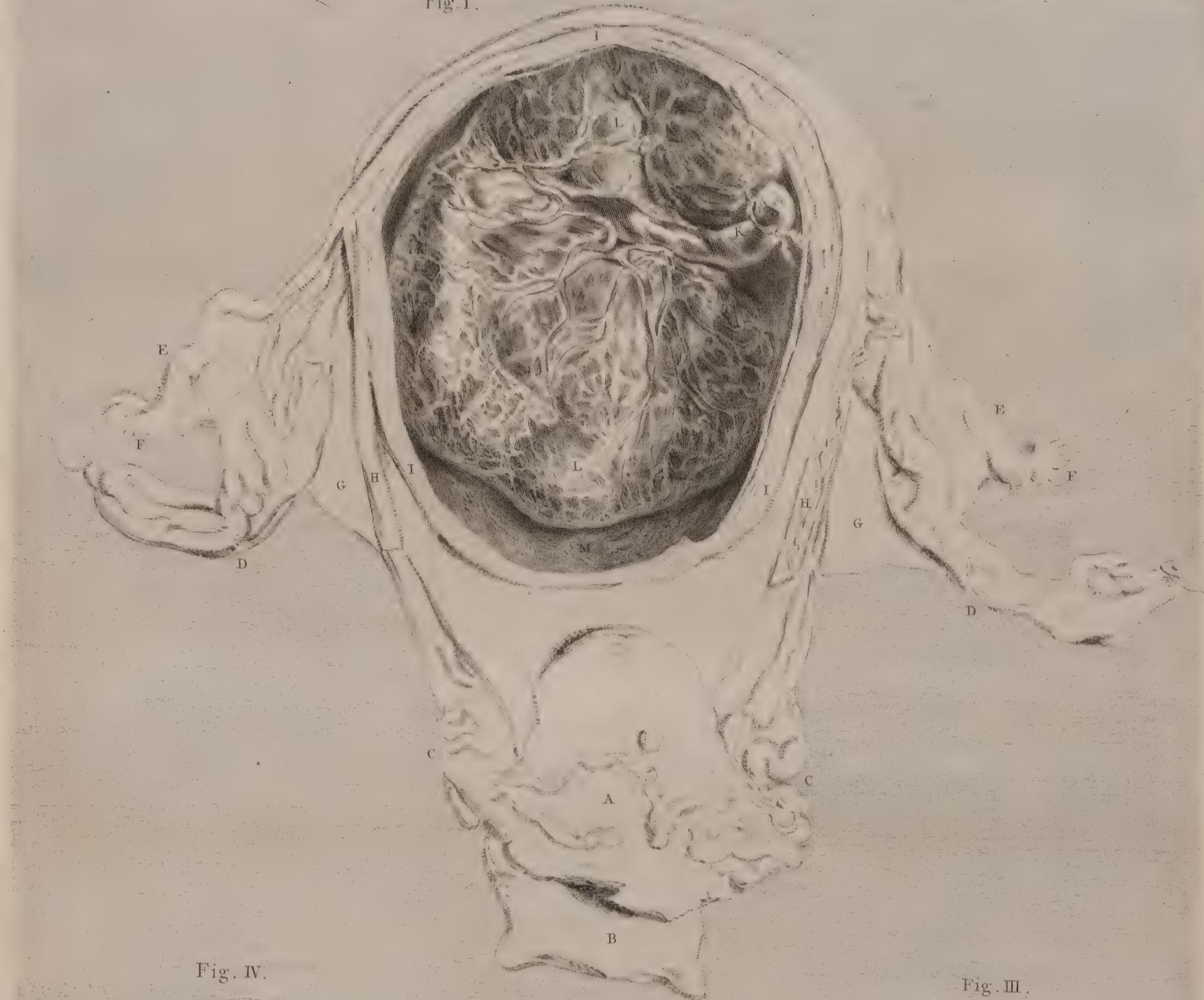


Fig. IV.



Fig. II.



Fig. III.

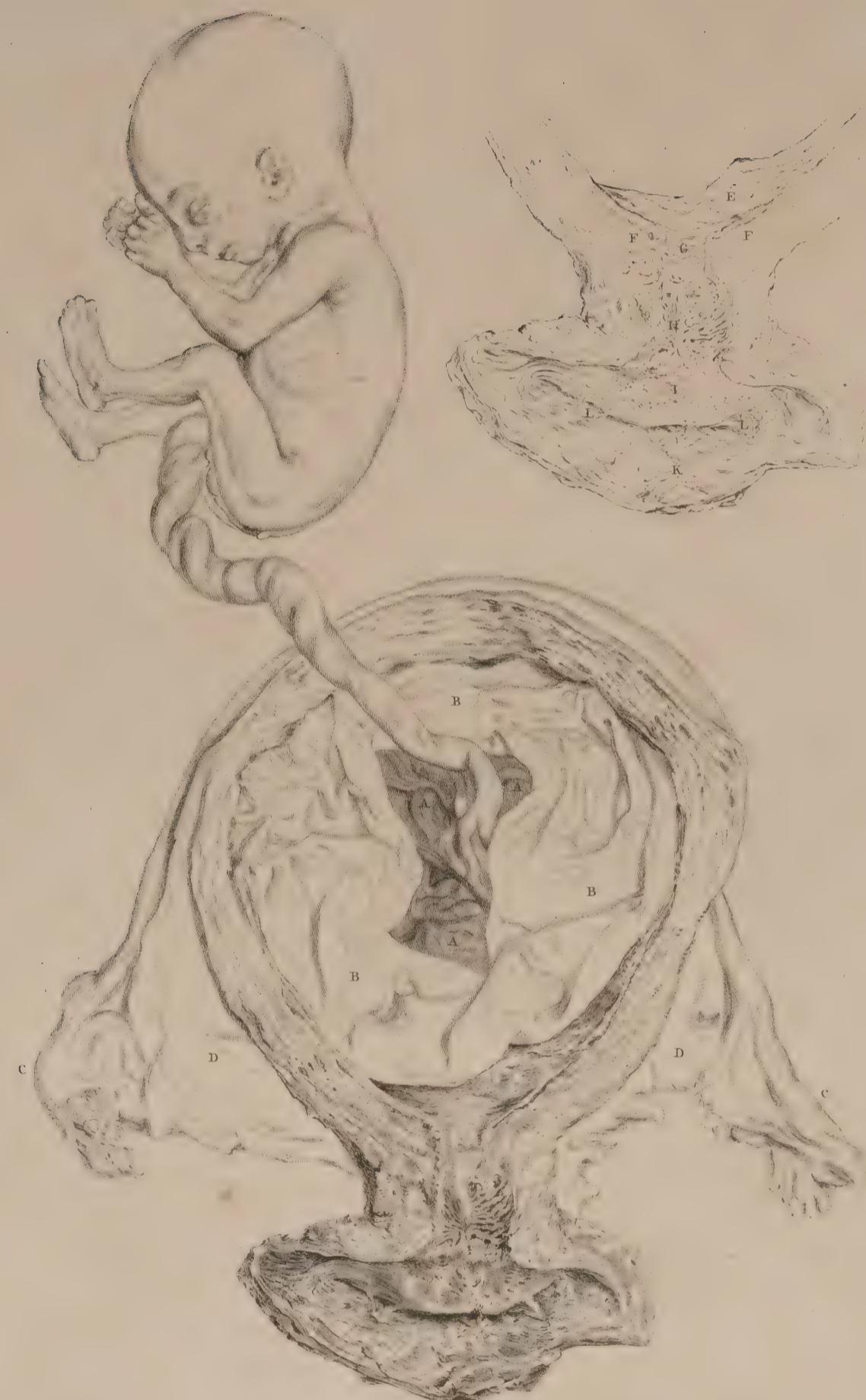


J. Rymond de detin.

TAB. XXIV. Ab eodem Culturere. Fig. I. Placenta Crundo et posterior Uteri parti adhaerens. Substantia ejus spongiosa injecta per vasa uterina eri turgescit. Fig. II. Portio aliqua Placenta transversum secta, ut substantia ejus spongiosa appareret, ejusdemque eri adimpletur crassitius. Fig. III. Sistit. Arterias. Fig. IV. Venas illius partis membranae Dividit, quae parietem Uteri anteriorum invaserat.







TA B. XXV. Aenium cadaver, quinto mense. Uterus omnino Uterus, ac Tonus inde exemptus, quo subtilius  
judicium feratur de Tonus ipsius; de partibus ipsius, secum invicem comparatis et dimensis; nec non de conditione  
Cervicis Uterinae quo sub hoc tempore obtinet.

J. B. Wymodiske delin.

Hand sculp.

## T A B U L A XXV.

**N**ONUM cadaver, quinto mense. Apertus omnino uterus, ac foetus inde exemptus; quo subtilius judicium feratur de foetu ipso, de partibus ejus secum invicem comparatis et dimensionis, nec non de conditione cervicis uterinae quae sub hoc tempore obtinet.

Foetus ipse, funisque umbilicalis illustratione non eagent.

**A A A** Vulnus per membranas factum, quo foetus eximiretur; unde internae faciei placentae pars, circa finem funis umbilicalis, cernitur.

**B B B** Amnion et chorion collapsa, et decidua reflexa (quae nondum cœperat deciduae ipsi adhaerescere) externe cooperata.

**C C** Tubæ.

**D D** Ligamenta lata.

Literas sequentes alteri figuræ separatim insculptas invenies.

**E** Decidua, omnem illam partem uteri, quam placenta non occupaverat, investiens.

**F F F F** Substantia cervicis uteri, ab altero latere ad alterum secta.

**G** Pars superior, angustior, et lævior introitus cervicis uteri, ubi decidua manifeste continuata fuit in membranam ejus internam.

**H** Pars inferior, latior, et rugosa, ejusdem.

**I** Facies interna posterioris labii oris uterini, vesiculis, glutine repletis, bullata.

**K** Facies interna vicinæ partis vaginalis.

**L L** Portiunculæ hæc duæ membranarum fluitantium, exhibent, imperfecte quidem, partes duas cuticulæ vaginalis investientis, quæ in cadavere, de quo agitur, distincte admodum, separabatur usque ad ipsam oris uteri prominentiam.

## P L A T E XXV.

**F**ROM the ninth subject, in the fifth month. The womb fully opened, and the foetus taken out; to shew the exact dimensions and proportions of the child, and the state of the cervix uteri at this period of utero-gestation.

The child and its Navel-string require no explanation.

**A A A** The opening made in the membranes for the extraction of the child, through which is seen the inside of the placenta around the termination of the navel-string.

**B B B** The collapsed amnion and chorion, covered externally with the decidua reflexa, which had not as yet contracted an adhesion to the decidua.

**C C** The tubes.

**D D** The broad ligaments.

The following letters are engraved on a separate figure in out-lines.

**E** The decidua, lining that part of the womb where the placenta did not adhere to it.

**F F F F** The section, from side to side, of the substance of the cervix uteri.

**G** The upper, narrower, and smaller part of the passage in the cervix uteri, where the decidua was evidently continued down into the inner membrane of that passage.

**H** The lower, wider, and rugous part of that passage.

**I** The inside of the posterior lip of the os uteri, studded with small bags of gelly.

**K** The inside of the adjacent part of the vagina.

**L L** The two small pieces of floating membranes, represent, though very imperfectly, two portions of the cuticular lining of the vagina; which, in this subject, was separated distinctly and evidently as far up as the projection of the os uteri.

## T A B U L A XXVI.

D E C I M U M cadaver, quinto graviditatis mense. Exhibetur status uteri retroversi.

### F I G. I.

Apertum cruciali incisione abdomen, contractioni autem forma exhibitum, cum vesica urinaria praeter morem distensa.

- A Incisio longitudinalis a scroboiculio cordis incipiens :
- B Qua ad montem veneris definientem.
- C Partum continentium anguli superiores, super hypochondria reflexi.
- D Anguli inferiores utriusque, super spinam ossis ilium reflexi.
- E Vesica urinaria, ita urina sanguinolenta distensa, ut fundus ejus ad diuidum spatii, umbilicum inter et scroboiculum cordis, porrigeretur.

### F I G. II.

Vesica urinaria, forma pariter minutiori, per medium divisa, et ad imam partem aperta, ut situs oris uterini, hic praeter naturam sursum spectantis, appareat.

- A A Pars dimidia vesicæ super spinam ossis ilium utrinque reflexa.
- B Incisionis, a vertice ductæ, qua vesica urinæ aperta fuit, finis anterior.
- C Unus recti intellini circuitus, qui in conspectum prodiit ad ejusdem finem posteriorem.
- Duas inter has literas B, C, vesicæ pars ima tumore, qui universum pelvis occupavit, elevata fuit: hic quoque, facta cruciali incisione parva, inter et paulo ante fines ureterum, os uteri in conspectum venit, pone situm, ut in hac figura, et paulo clarius quam pars superior symphyseos ossium pubis.

### F I G. III.

Contenta pelvis omnia a parte postica; inter quæ, uterus retroversus maximum locum habet.

- A Rectum, ubi in cavum pelvis transibat, deligatum.
- B B Margines posteriores sectionis vesicæ a vertice ductæ.
- C Rectum, uterum inter et ossa, sacrum et coccygis, compressum.
- D Peritoneum, quod, ad finitum recti intellini latus, pelvis investiuerat, ope catheteris, hanc partem inter et uterum immisæ, elevatum.
- E E Pars peritonei, parti modo deseriptæ respondens, ad dextrum recti intellini latus, percisæ, et margo ejus F sepositus.
- G Uteri facies anterior, retrorsum verba.
- H Tuba ascendens ab uteri fundo, qui scilicet ad partem pelvis infimam devoluta fuerat.
- I Ovarium ante tubam positum.

### F I G. IV.

Uteri portione, ac deciduæ parte sublatis, fœtus per pellucidas membranas, chorion nempe et amnion, conspicitur.

- A Os uteri fursus verbum. Circum undique conspicuntur partium vaginaliæ contiguarum interiora.
- B B Uteri substantia divisa.
- C Facies externa partis alicujus deciduæ. Membrana hæc densa, opaca, et arteriis parvis, injeclæ ab utero cera impletis, abundavit.
- D Facies interna alijs partis membranæ ejusdem. Qua parte ablata fuit decidua, per chorion pellucidum et amnion conspicitur fœtus, cuius caput dependet, et collum fune umbilicali circum-cingitur.
- Lineæ albæ super chorion leviter adumbratae, vasorum tenuium, quæ inde in deciduam transeunt, reliquias representant.
- Cum hæc tabula delineabatur, liquor amnii fanguine exudante infestus fuerat. Membranarum autem pellucidarum facies convexa figuram fatis distinctam, formam quidem contractam, fenestræ, lucem admittentis, dedit.
- Tubarum et ovariorum figuram huicce tabulæ inferere supervacaneum duxi.

## P L A T E XXVI.

FROM the tenth subject, in the fifth month, shewing the circumstances of a retroverted womb.

### F I G. I.

Shows, in miniature, the abdomen fully opened by a crucial incision, and the bladder enormously distended.

- A The beginning of the longitudinal incision at the pit of the stomach.
- B Its termination in the mons veneris.
- C C The upper angles of the containing parts, turned over the hypochondria.
- D D The lower angles; each turned over the spine of the os ilium.
- E The bladder, so distended with bloody urine, that its fundus reached half way between the navel and the pit of the stomach.

### F I G. II.

Drawn in miniature to the same scale, shews the bladder cut down through its middle, and opened, at its lower part, to shew the situation of the os uteri.

- A A Half of the bladder, on each side, turned over the spine of the os ilium.
- B The anterior extremity of the vertical incision by which the bladder was opened.
- C One turn of the rectum which was seen at the posterior end of the same incision.
- Between these two letters, B, C, the depending part of the bladder was raised up by a tumor which possessed the whole cavity of the pelvis: and here, a small crucial incision having been made, between, and a little before the ends of the ureters, the os uteri was seen, as in this figure, situated behind, and a little higher than the upper part of the lymphatics of the os pubis.

### F I G. III.

A back-view of the whole contents of the pelvis, confining principally of the retroverted womb.

- A The rectum tied, where it passed down into the cavity of the pelvis.
- B B The posterior edges of the vertical section of the bladder.
- C C The rectum, where it was pressed and flattened, between the womb and the sacrum and os coccygis.
- D D The peritoneum, which lined the pelvis on the left side of the rectum, raised up by a large catheter, introduced between it and the womb.
- E E F The corresponding part of the peritoneum on the right side of the rectum, sitt down, and the edge F turned off.
- G The anterior surface of the womb, turned backwards.
- H The tube, coming up from the fundus uteri, which was turned down, into the lowest part of the cavity of the pelvis.
- I The ovary, placed before the tube.

### F I G. IV.

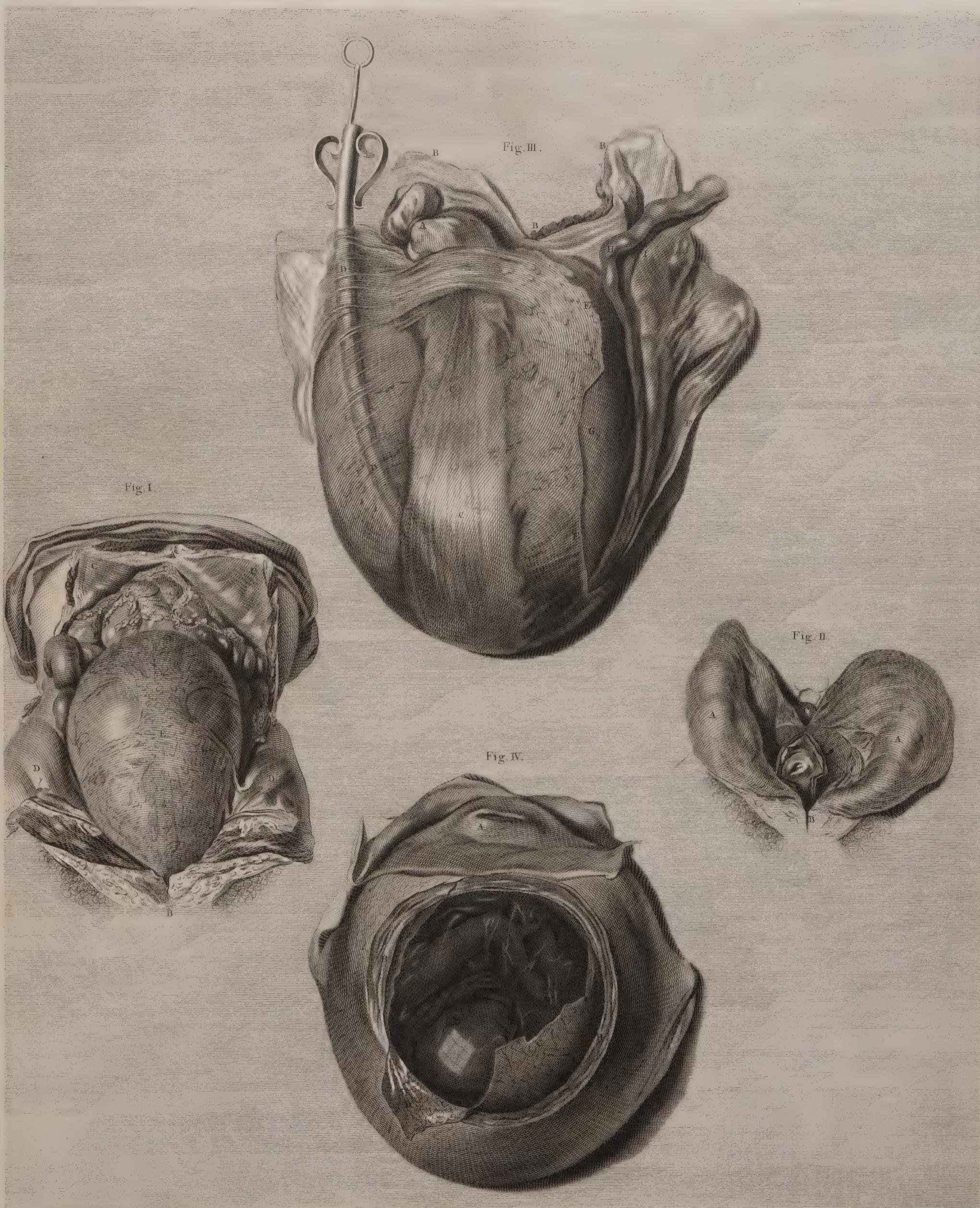
The womb opened, to shew the secundines and their contents.

- A The os uteri, turned upwards. All around it, is seen the inside of the adjacent parts of the vagina.
- B B The substance of the womb, cut through.
- C The external surface of part of the decidua. This membrane was thick and opaque, and full of small arteries, which were injected from the womb.
- D The internal surface of another part of the same membrane. Where the decidua was removed, through the transparent chorion, and amnion, is seen the fœtus, with its head depending, and the funis round its neck.

The white, loose lines on the chorion are the remains of the filamentous vessels, which pass from it into the decidua.

The liquor amnii was become bloody, by transfusion, when this figure was drawn; and the convex surface of the transparent membranes, reflected a distinct miniature picture, of the window which gave light.

It was thought unnecessary to introduce the tubes and ovaria.

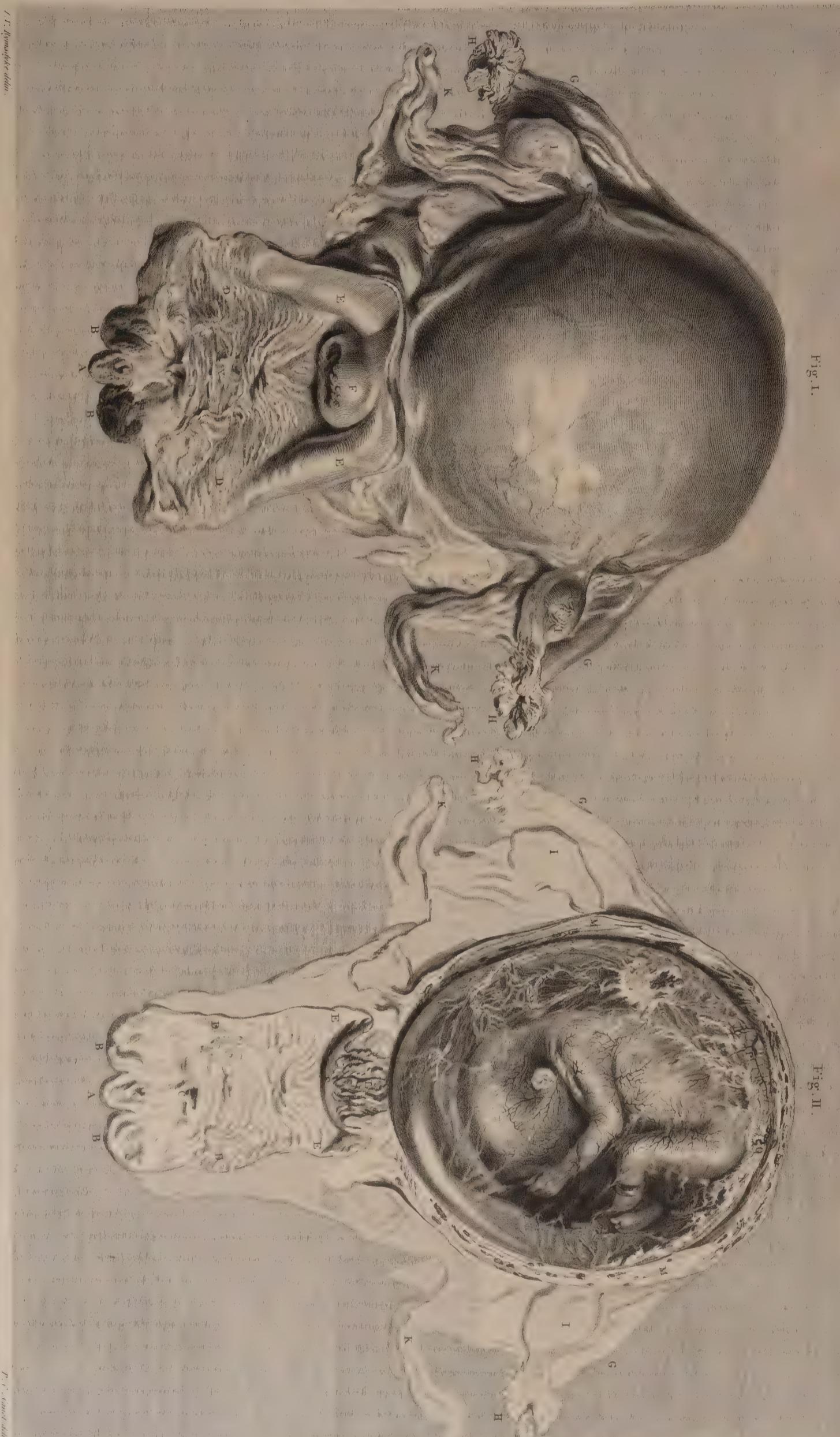


TAB. XXVI. Decimum cadaver, quinto graviditatis mense. Exhibetur status Uteri retroversi. Fig. I. Opertum decupitali incisione. Abdomen, sed contractiori formâ exhibitum, cum Vesica Urinaria propter morem distentâ. Fig. II. Vesica Urinaria, formâ pariter minutâ, per medianam divisa et ad imum partem aperita, ut situs vero Utrinchi propter naturam sursum spectantis apparet. Fig. III. Contenta Pelvis omnia a parte posteriori. Fig. IV. Uteri portione de Decidua parte sublatâ, Partus per pollucidas membranas, Chorion nempe et. Utrion, conspicitur.

Stom. sculp.







## T A B U L A    XXVII.

UNDÉCIMUM cadaver, mense quinto incunē. Duæ figuræ. Arteriæ et venæ cera diversi coloris impletæ sunt.

### F I G. I.

Uterus a tergo visus, una cum vagina eo confilio incisa, ut status cervicis oris que uteri oculo objiciretur.

- A Clitoris.
- BB Nymphæ.
- C Proxime hanc supra literam, orificium urethræ conspicitur.
- DD Vaginæ pars extrema inferior, rugis aspera.
- EE Ejusdem pars extrema superior, altera lævior, præcipue a parte postica.
- F Uteri orificium, in terminum vaginæ superiorem se projiciens.
- GG Tubæ.
- HH Fimbriæ.
- II Ovaria.
- KK Vasorum spermaticorum fasciculus, per ligamenta lata, ad ovaria, tubas, et fundum uteri ascendentium.

### F I G. II.

Utero omnino aperto, membrana decidua reflexa, chorio super extensa (per quas membranas fœtum videoes) et cervicis oris que uterini facies interna apparent.

- A, BB, C, DD, EE, F, GG, H, II, KK, vide fig. I.
- L Cervicis uteri facies interna rugosa, per gluten pellucidum cernitur.
- MM Substantia tam uteri quam deciduæ percissa.
- NN Decidua reflexa, membranas pellucidas investiens, alba, opaca, striata, distentu adeo tenuata, ut in locis plurimis fere pellucida videretur: deciduæ, quæ hanc obtegebant, adhærefcere nondum cœperat.
- O Arteria convoluta, per deciduam reflexam, a margine placentæ excurrens.
- P Vena huic similis.
- Vafa fœtus sub cute repentina, fanguine adeo distincte adimplita sunt, ut profecto vasorum cadaveris, cera injecta turgentium, imaginem pre se ferrent.
- Funis umbilicalis pars altera fœtus collum ambibat, talum fistulum altera.

## P L A T E    XXVII.

Two figures from the eleventh subject, in the beginning of the fifth month. The arteries and veins were injected with wax of different colours.

### F I G. I.

A back-view of the womb, with the vagina slit up to shew the state of the cervix and os uteri.

- A The clitoris.
- B B The nymphæ.
- C Immediately over this letter is the orifice of the urethra.
- D D The lower end of the vagina, which is rugous.
- E E The upper end, which is more smooth, especially behind.
- F The orifice of the womb, projecting into the upper end of the vagina.
- G G The tubes.
- HH The fimbriæ.
- I I The ovaries.
- KK The bundle of spermatic vessels, passing up, in the broad ligaments, to the ovaries, tubes, and fundus of the womb.

### F I G. II.

The same womb fully opened, shewing the decidua reflexa upon the chorion, (through which the child appears,) and the inside of the neck and orifice of the womb.

- A, BB, C, DD, EE, F, GG, HH, II, KK, see fig. I.
- L The rugous inside of the neck of the womb, seen through the transparent cement.
- MM The substance, both of the womb and of the decidua, cut through.
- NN The decidua reflexa, covering the transparent membranes, in white and opake striæ. It was become so thin, by extention, as to be rendered almost transparent in many places. ~~It had not as yet contrated an adhesion with the decidua which covered it.~~
- O A convoluted artery, branching through the decidua reflexa, from the edge of the placenta.
- P A vein of the same kind.
- V The cutaneous vessels of the child were as distinctly filled with blood, as if they had been injected.
- One turn of the navel-string was round the child's neck, and another was twisted round the left ankle.

## T A B U L A XXVIII.

### F I G. I.

**I**DE M uterus quem exhibet figura secunda tabulae præcedentis, sed inverlus (i. e. fundo decliviori); ut, contentis suo pondere a cervice fundum verlus devolutis, margo placente clarius distinguitur; ac decidua, quæ ibidem ab interno uteri pariete in externam chorii superficiem reflexa, nomen decidua reflexæ affumit, melius conspiciatur.

Partes lineis adumbratae in tabula præcedenti modo expositæ sunt atque explanatae: scilicet *A, BB, C, DD, EE, F, GG, HH, II, et KK*, in figura prima; atque *L et MM* in figura secunda.

*NNN* Decidua crassa, faciem internam uteri, ubi placenta non adhaerescet, investiens.

*OOO* Placentæ margo, ubi lamina interna decidua a facie interna uteri, ad faciem membranarum externam, inflexa fuit atque continuata; quo in loco efficit.

*PP* Deciduam reflexam, eo magis attenuatam, quo longius a margine placentæ distat.

*Q* Hic patuit, deciduam non eodem modo, quo cæteræ membranæ, trans aditum in cervice uteri se porrexisse; sed per paullum spatiæ intra hunc aditum, more investientis membranæ, esse continuatam; tandemque sensim evanuisse, aut cum glutine illo, quod vice cæmenti fungitur, esse confusam.

### F I G. II.

Ejusdem uteri facies interna, qualis apparuit, placenta jam separata.

*A, BB, C, DD, EE, F, GG, HH, II, KK*, Vide tabulae præcedentis figuram primam.

*L, MM*, Vide ejusdem tabulae figuram secundam.

*NNN* Pars decidua, inndique circa placentæ marginem, etiamnum utero intus adhaerescens.

*O* Centrum superficie orbiculatae, in uteri parte anteriori, cui placenta hoc in cadavere adhaerescet. Haec arteriis venisque abundabat, quæ scilicet utero ac placentæ communes fuerant, quasquæ necessario perrupi, duas has partes dum separabam. Arteriae quidem parvæ erant, convolutæ, colorisque magis lucidi, ut ad literam *P*; vena autem perruptæ speciem macularum fuscarum, vel foraminum, magnitudinis haud exiguae, præ se ferebant, ut ad literam *Q*.

Linea inæqualis quæ superficiem hanc scabram, cui placenta adhaerescet, ambit, extreum marginem placentæ a membranis abscissæ designat; eadem etiam indicat locum quo decidua lamina interna reflexa fuerat, circum undique, in faciem chorii externam.

## P L A T E XXVIII.

### F I G. I.

**T**HE womb, from the same subject, turned upside down, that the weight of its contents might carry them towards the fundus; to shew the border of the placenta, where the decidua is reflected from the inside of the womb, to the outside of the chorion, at which last place it makes the decidua reflexa.

The parts represented in out-lines were seen and explained in the preceding plate, viz. *A, BB, C, DD, EE, F, GG, HH, II, and KK*, in the first figure, and *L, MM*, in the second.

*NNN* The thick decidua, lining the inside of the womb, where the placenta was not attached.

*OOO* The edge of the placenta, where the inner layer of the decidua was continued, by inflexion, from the inside of the womb to the outside of the membranes; at which last place it constitutes

*PP* The decidua reflexa, which becomes thinner, in proportion as it is farther distant from the edge of the placenta.

*Q* Here it was evident that the decidua was not, like the other membranes, extended across the passage in the neck of the womb, but was continued a little way down that passage, and there inflexibly lost, or blended with the glutinous cement.

### F I G. II.

The inside of the same womb, after the placenta had been separated.

*A, BB, C, DD, EE, F, GG, HH, II, KK*, See the first figure of the preceding plate.

*L, MM*, See the second figure of the preceding plate.

*NNN* Part of the decidua all around the edge of the placenta, left adhering to the inside of the womb.

*O* The centre of the circular surface at the forepart of the womb, to which the placenta, in this case, adhered. It was full of arteries and veins, which had passed between the womb and placenta, and which we broke through in separating these two parts: the arteries were small, and convoluted, and of a lighter colour, as at the letter *P*; the broken veins had the appearance of dark spots, or holes, of some considerable size, as at the letter *Q*.

The irregular line, which surrounds this rough surface to which the placenta adhered, points out the extreme border of the placenta, which was cut off from the membranes, and where the inner layer of the decidua, all around, was reflected upon the outer surface of the chorion.

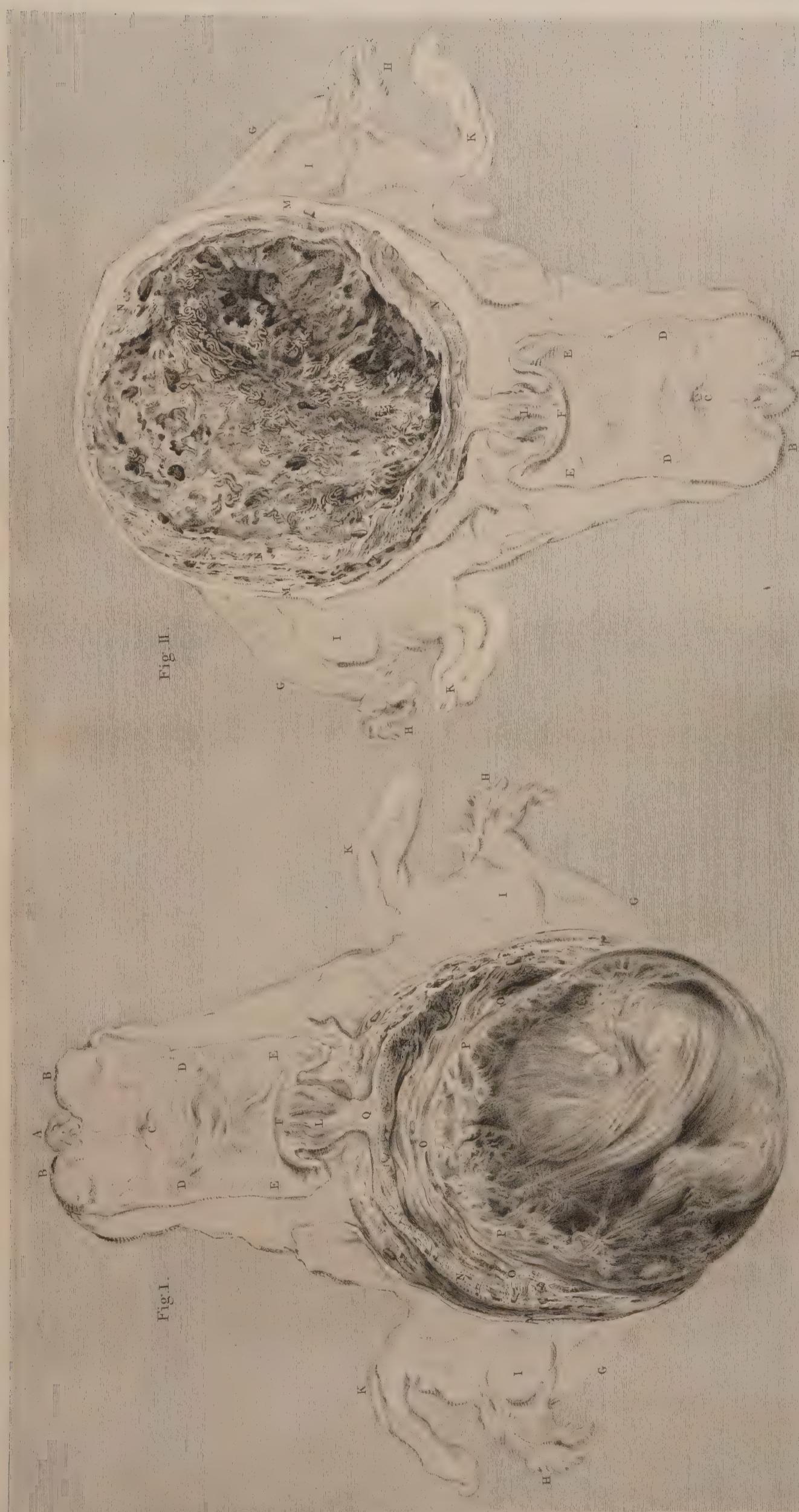
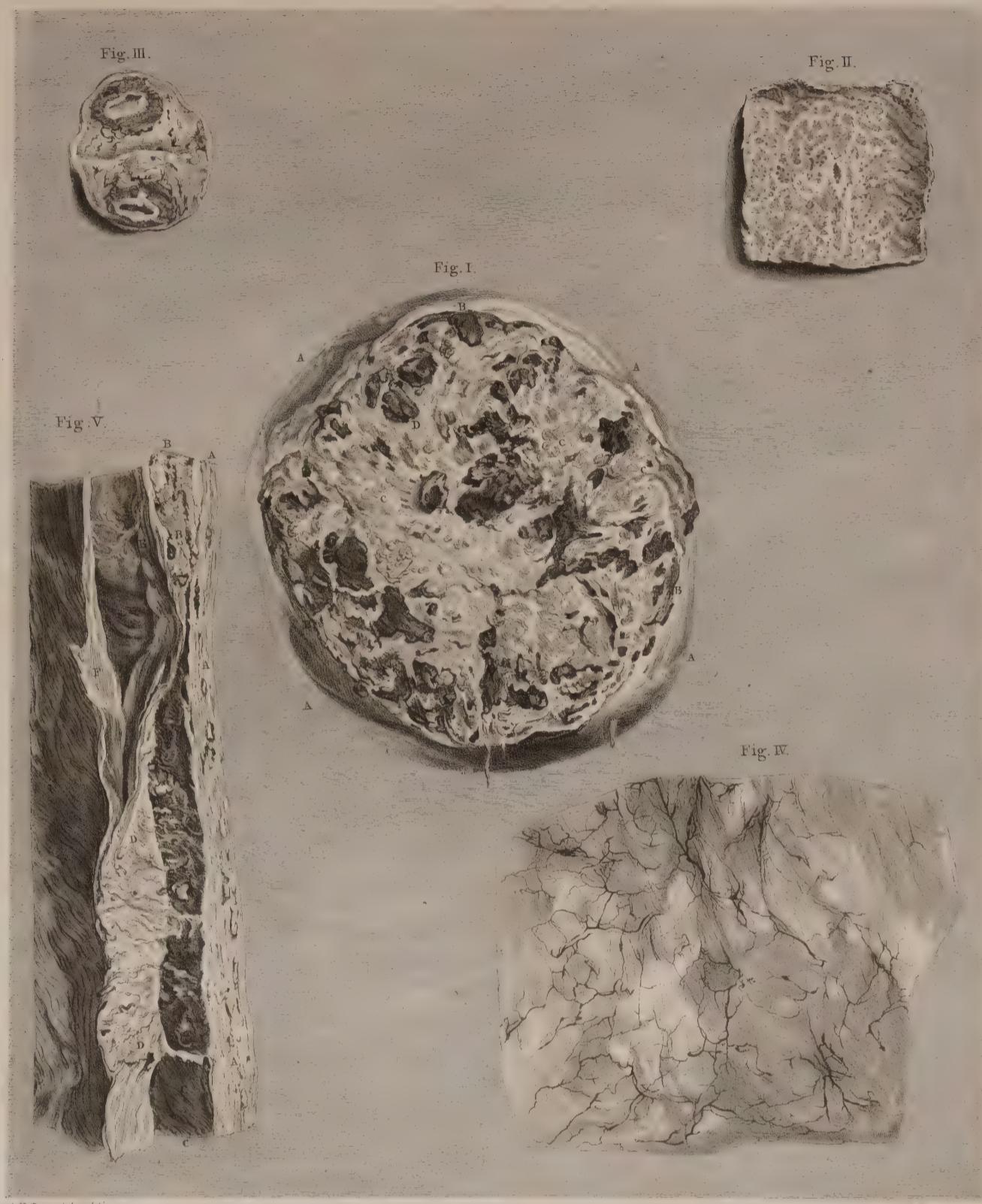


Fig. I.

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L. V. Remondi de detin.  
 TAB. XXIX. Quinque figuræ exhibet, quarum tres priores ex cœlum sunt Cadavere. Fig: I. Crum  
 Uteri exemptum. Fig: II. Pari Placidae vitro adhibito amplificata. Fig: III. Ovarium cum Corpore luteo.  
 Fig: IV. Portio membranarum nono mense. Fig: V. Pari Uteri et Placenta cum membranis.

## T A B U L A XXIX.

T R E S figuræ ad idem exemplar depictæ; quibus adjiciuntur duæ aliæ, tanquam appendices.

F I G. I.

Ovum utero exemptum, faciem placentæ externam reprensans, laciniasque marginem ejus undique ambientes, membranæ scilicet deciduæ reflexæ dilaceratæ reliquias. Hæc figura cum figura secunda præcedentis tabula congruit, faciem ovi exhibens, quod isti utero intus adhaerat.

AAA Decidua reflexa, undique a margine placentæ, ad chorion integrum, exiens.

BB Limbus, marginem placentæ circum-ambiens, ortus scilicet ex sectione deciduæ reflexæ, ubi illa separata fuit a decidua, aut, si ita loqui mavis, a facie uteri interna.

Circulus, limbo isto circundatus, faciem externam placentæ exhibet, quæ utero adcreverat. Has partes dum separabamus, arteriæ venæque plurimæ dilaceratæ sunt, quarum pars altera utero adnexa est, altera placentæ. Arteria quidem, ut in figura præcedenti, parvæ, convolutæ, et colore sunt lucidiori, ut ad literas CCC; venas autem maculæ latæ ac fuscæ representant, ut ad literam D.

F I G. II.

Partis membranæ deciduæ facies interna, ope vitri optici amplior visa, ut textura ejus propria, cibrum haud male referens, explicari posset.

F I G. III.

Ovarium, corpusque luteum percisso. Corpus luteum, etiam ad hoc temporis, cavatum esse manifeste apparuit.

F I G. IV.

Figura addita.

Pars aliqua membranæ deciduæ, pertinentis ad partum legitimum, mensibus scilicet novem rite exactis.

F I G. V.

Alia figura addita.

Portio aliqua uteri et secundarum, nono mense, ita disposita, ut earum partium strata diversa distincte conspiciantur. Arteriæ cera rubra, venis flava est injecta.

AAA Uteri substantia percisso.

BB Placenta ei adhærens, prope marginem percisso.

CC Decidua ea in parte utero adhærens.

DD Decidua in illa parte ab uteri facie interna elevata, chorioque adhærens.

E Chorion, supra faciem internam placentæ continuatum, ubi separari non potest.

F Amnion elevatum a chorio, cui non, nisi per gluten aliquod mollissimum, adhaerit.

## P L A T E XXIX.

T H R E E figures from the same subject, and two supplemental.

F I G. I.

The ovum taken out of the womb, shewing the external surface of the placenta, and the ragged edge all round, where the decidua reflexa was torn through. This figure corresponds with the second figure in the preceding plate, shewing the surface of the ovum which was attached to the inside of that womb.

AAA The decidua reflexa going off, all round, from the edge of the placenta, to cover the chorion.

BBB The edge, formed all round the brim or border of the placenta, by cutting the decidua reflexa where it came off from the decidua, or, in other words, from the inside of the womb.

The round surface, enclosed by that edge, is the outer surface of the placenta, which had adhered to the womb. In separating those two parts, many arteries and veins were torn through, one part of each remaining with the womb, and the other with the placenta. The arteries, as in the preceding figure, are small, convoluted, and of a lighter colour, as at the letters CCC; the veins make broad dark spots, as at the letter D.

F I G. II.

The internal surface of a portion of the decidua, considerably magnified, to shew its peculiar cribiforme or lace-like appearance.

F I G. III.

The ovarium and corpus luteum cut through; the latter of these, even at this time, had an apparent cavity.

F I G. IV.

A supplemental figure.

A portion of the decidua, from a common delivery at nine months; its vessels filled with red blood.

F I G. V.

Another supplemental figure.

Part of the womb and secundines, at nine months, so disposed as to exhibit distinctly the different strata of those parts. The arteries had been injected with red wax; the veins with yellow.

AAA The substance of the womb cut through.

BB The adhering placenta cut through, near its edge.

CC The decidua, at that part left adhering to the inside of the womb.

DD The decidua, at this part raised from the inside of the womb, and adhering to the chorion.

E The chorion, which is continued upwards over the inside of the placenta, where it cannot be separated.

F The amnion, raised up from the chorion, to which it adhered by a tender gelly only.

## T A B U L A    XXX.

**A** Duodecimo cadavere, quarto mense decurrente. Uterus a parte antica apertus, vasis cera repletis. Precipue hic notanda occurunt, superficies placentæ externa; vasa ex utero se immergentia in placentam; cervicis uteri externa, qualis facies, sit, et, respectu ad vesicam urinariam urethramque habito, quem situm obtineat.

Placentæ superficies, sectione uteri substantiæ circumdata, adeo refert præcedentem, scilicet fig. I. ut explanatione minime indigeat.

*AA* Vasa spermatica.

*BB* Fimbriæ, five tubarum partes extremæ.

*CC* Ovaria. Horum simistrum corpore luteo nonnihil auctum fuit.

*DD* Ligamenta rotunda.

*E* Cervix uteri contracta.

*F* Facies interna portionis istius vesicæ, quæ vaginæ subiecta adhæret. Utroque in latere, et hac litera paulo superius, cernitur orificium urethrae.

*G* Urethra universa omnino aperta.

## P L A T E    XXX.

**F**ROM the twelfth subject, in the fourth month, shews the injected womb, opened on its fore part, to give a full view of the external surface of the placenta, with the vessels passing into it from the womb. It shews likewise the state of the cervix uteri externally, and its relation to the bladder and urethra.

The surface of the placenta, surrounded by the section of the substance of the womb, is so much like that of the first figure in the preceding plate, that it requires no explanation.

*AA* The spermatic vessels.

*BB* The fimbriæ, or ends of the tubes.

*CC* The ovaria. The left was enlarged by the corpus luteum.

*DD* The round ligaments.

*E* The cervix uteri, in a contracted state.

*F* The inside of that portion of the bladder which adheres to the subjacent vagina. On each side, and a little higher than this letter, is seen the orifice of the ureter.

*G* The urethra opened in its whole length.



J. V. Rymsdyk delin.  
TAB. XXX. A duodecimo cadavere, quarto mense decurrente: Uterus a parte antica aperitus, vasis cervi repletis.  
Principue hic notandi occurant, 1. superficies Placentis externa; 2. aua in Placentum ex Utero se immersentia;  
Cervix uteri externa; 3. vasis, quibus sit, et respectu ad Uterum Uniuscunq; Uterumque habito, quem situm obineat.





Fig. I.



Fig. II.

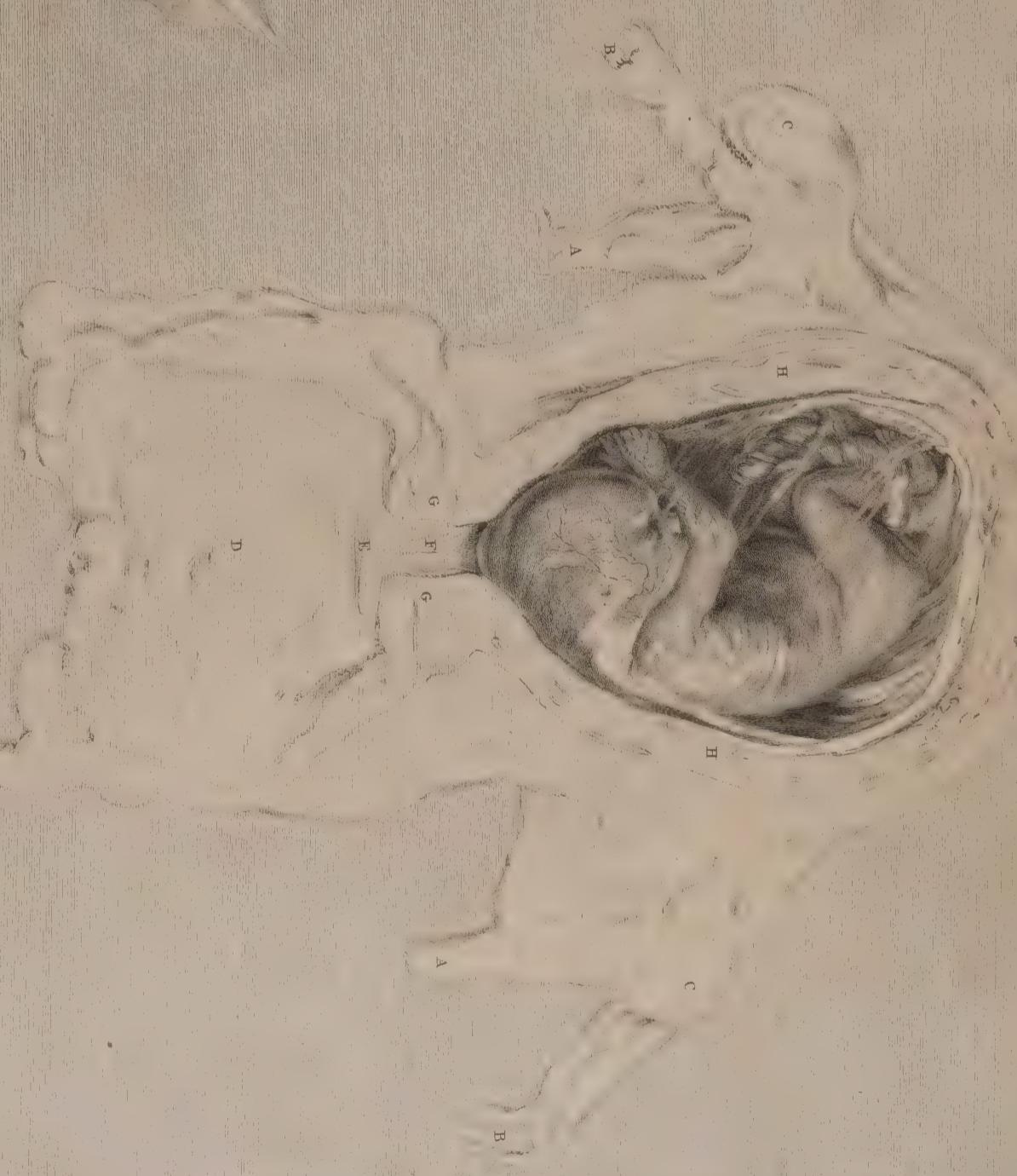
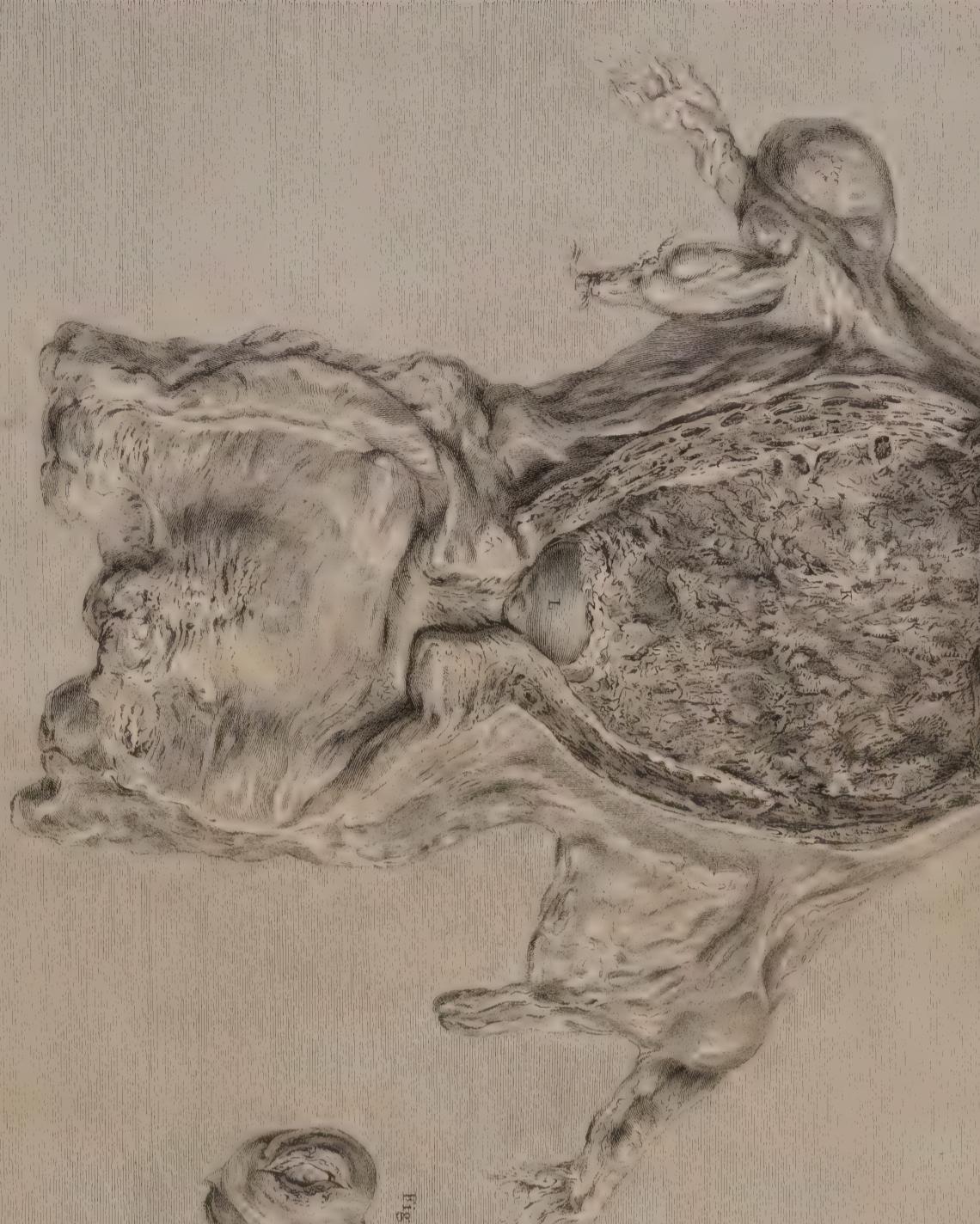


Fig. III.



J. T. Bonaparte deline.

Mod. Jodhp.

TAB. XXXI. Tres figure ab ostende Cadavere. Fig. I. Uterus a parte posterior sua aperitus, ut. Fantes Membrane Ductus extrema, ac. statim Seminis interior utramque effundantur. Fig. II. Fetus postea per pallidissimam membranam aphant. Fig. III. Ovarium aphantum cingulato. Sunt curam ostendit.

## T A B U L A XXXI.

T R E S figuræ ab eodem cadavere.

### F I G. I.

Uterus a parte postica ita apertus, ut facies membranæ deciduae externæ, ac status cervicis uterinæ visui exponantur.

Literas tabulæ huic explanandæ accommodatas omnes præter *II, K* et *L*, in figura secunda videas.

- AA* Vasa spermatica.
- BB* Fimbriæ.
- CC* Ovaria.
- D* Vagina univerfa, quaqua in longum extenditur, omnino aperta.
- E* Os uteri in vaginam se protendens.
- F* Via rugosæ, per cervicem uteri ducens, unde gluten illud consolidans jam excederat.
- GG* Sectio substantiæ cervicis uteri.
- HH* Sectio substantiæ uteri, unde
- II* Pars posterior totius substantiæ uteri de decidua sublata et in fundum uteri revoluta cernitur.
- K* Decidua, adhuc membranis adhærescens, superficiem suam scabram externam exhibens, unde uterus fuerat separatus. Membrana hæc vasis, cera impletis, venis maxima de parte, abundavit. Plurimis autem in locis, cera, vasis effusa, hæc visu indistincta reddiderunt.
- L* Membranæ pellucidæ, amnion scilicet et chorion, decidua reflexa tenuissima et pellucida obtecta, in aditum cervicis uteri, ubi decidua ipfa deficit, viam fibi facientes.

### F I G. II.

Idem uterus; postquam scilicet inversa pars uteri fuerat abscissa, et decidua ablata, ea mente ut fœtus, in liquore amnii natans, per pellucidas membranas apparet.

Decidua reflexa hic adeo tenuis fuit, ut, nisi ad marginem placentæ, vix percipi posset.

Fœtus, cuius crura fune umbilicali circum-vincta sunt, per se fatis est manifestus.

### F I G. III.

Corpus luteum ovario in finistro percisum, ut appareat qualem sit ejus cavum, sub hoc tempus gestationis. Qualem se habeat cicatricula illa, in externa facie corporis lutei ovarii finistri, ibi cernitur, ubi stat litera *C*, in figuris prima et secunda.

## P L A T E XXXI.

T H R E E figures, from the same subject.

### F I G. I.

A back-view of the womb, so opened as to expose the outer surface of the decidua, and to shew the state of the neck of the womb.

The letters for explanation, except *II, K*, and *L*, are seen in fig. *II*.

- AA* The spermatic vessels.
- BB* The fimbriæ.
- CC* The ovaries.
- D* The vagina laid open in its whole length.
- E* The os uteri protuberating into the vagina.
- F* The rugous passage through the neck of the womb, from which the viscous cement had, by this time, fallen out.
- GG* The section of the substance of the cervix uteri.
- HH* The section of the substance of the womb; whence
- II* The posterior part of the whole substance of the womb, raised up from the decidua, and turned over the fundus of the womb.
- K* The decidua left upon the membranes, shewing its scabrous outer surface from which the womb was separated. It was crowded with injected vessels, especially veins; and in many places the wax was extravasated, which occasioned indistinctness.
- L* The transparent membranes, viz. amnion and chorion, covered with a very thin and transparent decidua reflexa, pushing down into the passage of the cervix uteri, where the decidua is wanting.

### F I G. II.

The same object, after the inverted portion of the womb had been cut off, and the decidua removed, to shew the fœtus, in the liquor amnii, through the transparent membranes.

The decidua reflexa in this subject was so thin, that it was scarcely perceptible, except near the edge of the placenta.

The fœtus, with the navel-string round its legs, requires no explanation.

### F I G. III.

The corpus luteum, in the left ovary, cut through, to shew its cavity at this period. The appearance of the cicatricula, upon the outside of the corpus luteum in the left ovary, is seen where the letter *C* stands in the first and second figures.

## T A B U L A XXXII.

FIGURÆ duæ, a decimo tertio cadavere, tertio mense prorsus exacto.

### F I G. I.

Uterus a parte antica apertus, unde foetus cervicisque uteri flatus in conspectum prodeunt.

AA Ligamenta lata.  
 BB Ligamenta rotunda.  
 CC Tubeæ.  
 DD Fimbriæ.  
 EE Ovaria.  
 F Vagina omnino aperta.  
 G Oris uterini labium posterius.  
 HH Via per cervicem uterinam.  
 III Sectio substantiæ uteri, portione quadam ovali excisa, ut contenta ejus sub examen venirent.  
 K Membranæ perfissæ.  
 L Faciei internæ uteri pars.  
 M Pars ista deciduæ, quæ inde separata fuit. Prope hanc literam cernitur foramen quoddam, (locus nimirum ubi deciduæ deest) viæ quæ per cervicem uteri ducit, exadversum situm.  
 N Deciduæ reflexa, nec non chorion et amnion, perfissa.  
 O Placenta parti posteriori uteri adhaerens.  
 Foetus, cum collo fune umbilicali bis circundato, abunde patet.

### F I G. II.

Uteri, placentæ et membranarum secundum longitudinem sectio, cum foetu juxta fito, funiculo autem umbilicali nondum diuincto.

AA Vaginæ facies interna.  
 BB Os uteri perfissum.  
 CC Cervix uteri perfissa.  
 DE Via quæ per cervicem dicit, cuius, in parte posteriori E, rugæ penniformes conspicuntur.  
 FFFF Sectio fundi uteri, ubi conceptus sedem habebat.  
 GG Sectio placenta, quæ retrosum adhaerat, ubi uterus, de quo agitur, præter morem crassus visus est.  
 HH Placentæ superficies interna, amnio et chorio obtecta.  
 I Uteri superficiæ interioris pars.  
 K Pars parva deciduæ, inde separata.  
 LL Deciduæ facies interna, sive cavum ipsam inter et deciduam reflexam.  
 M Angulus prope marginem placentæ, ubi deciduæ lamella interior super chorion reflectitur, nempe ad deciduam reflexam faciendam.  
 N Deciduæ reflexæ facies externa; sive cavum, membranam illam inter et deciduam.  
 O Margines secti deciduæ reflexæ et chorii, quæ inter se intime connectuntur.  
 P Margo amnii sectus.

## P L A T E XXXII.

Two figures from the thirteenth subject, at full three months.

### F I G. I.

A fore-view of the womb opened, to shew the child, and the state of the cervix uteri.

AA The broad ligaments.  
 BB The round ligaments.  
 CC The tubes.  
 DD The fimbriæ.  
 EE The ovaries.  
 F The vagina laid open.  
 G The posterior lip of the os uteri.  
 HH The passage through the cervix uteri.  
 III The section of the substance of the womb, where an oval piece was taken out to shew its contents.  
 K The membranes cut through.  
 L Part of the internal surface of the womb.  
 M That part of the decidua which was separated from it. Near this letter is the hole, or deficiency of the decidua opposite to the passage through the cervix uteri.  
 N The deciduæ reflexa, chorion and amnion cut through.  
 O The placenta, adhering to the posterior part of the womb.  
 The foetus, with two turns of the navel-string round its neck, requires no explanation.

### F I G. II.

A longitudinal section of the womb, placenta and membranes; with the child near it, but still attached by the navel-string.

AA The inside of the vagina.  
 BB The os uteri cut through.  
 CC The cervix uteri cut through.  
 DE The passage through the cervix; in the posterior part of which E, the penniform rugæ are conspicuous.  
 FFFF The section of the fundus uteri, in which the conception was lodged.  
 GG The section of the placenta, which adhered backwards, where this womb was remarkably thick.  
 HH The internal surface of the placenta, covered with the amnion and chorion.  
 I Part of the inner surface of the womb.  
 K A small part of the decidua separated from that inside of the womb.  
 LL The internal surface of the decidua; or the cavity between the decidua and decidua reflexa.  
 M The angle, near the edge of the placenta, where the inner layer of the decidua is turned over the chorion to form the decidua reflexa.  
 N The outside of the decidua reflexa; or the cavity between that membrane and the decidua.  
 O The cut edges of the decidua reflexa and chorion, which are intimately connected.  
 P The cut edge of the amnion.



TAB. XXXII. *Obra a divino kerdo indaver figura, terzo mense clausa. Fig. I. Uterus a parte anteriori patitur, partum cum viru utrinque contentum ambiantur obiunt. Fig. II. Nihil utrum verum longitudinem, nam. Placenta et membrana, divisa, afferente etiam partu, ac per funiculum umbilicalem adhanc.*

*T. V. Bremekke delin. Sculps.*







## T A B U L A XXXIII.

OVA tria abortiva, sex figuris expressa.

### F I G. I.

Ovum nonæ circiter hebdomadæ abortivum, ab ista scilicet parte quæ membranacea est adspicuum. Decidua lacerata est, et aliquantulum revoluta, ut decidua reflexa lœvis et opaca in conspectum prodiret.

- A A Decidua ab utero separata facies externa scabra.
- B Facies externa portiunculae cuiusdam placentæ, cuius reliqua pars fedem suam exadversum habebat.
- CCCCC Decidua facies interna cribiformis, quæ primis mensibus graviditatis membranis inclusa non adhærescit.
- DDDD Decidua margo laceratus, qui in marginem EEE membranae ejusdem cursum suum tenuerat.
- F Decidua reflexa per faciem externam chorii diffusa.
- GG Angulus partis reflexæ, ad marginem scilicet placentæ, ubi lamella interior decidua in chorion reflectitur, simili fere modo quo lamella interior pericardii reflectitur ad superficiem externam cordis obtegendam.
- H Extrema pars decidua ad cervicem uteri.

### F I G. II.

Ejusdem seccio a vertice ad imum usque.

- A A A Sectio placentæ, quam superficie superiori et posteriori uteri adhæsive supponendum est.
- B B Decidua partis anterioris seccio.
- C C Decidua partis posterioris seccio.
- D Pars extrema decidua ad cervicem uteri.
- E E Amnii cavum, in quo fœtus, ope funiculi tenuissimi umbilicalis, a facie interna placentæ suspenditur.
- F Seccio trium membranarum, scilicet amnii, chorii et decidua reflexæ, quæ non solum sunt contiguæ, sed et sibi invicem adhærescant.
- G G Angulus ad marginem placentæ, ubi lamella interior decidua in faciem externam chorii reflectitur.
- H Hic tres istæ membranae paululum sejunguntur, ut situs earum, respectu habito ad placentam, manifestius appareat.

### F I G. III.

Ovum octo circiter hebdomadarum abortivum. Pars quædam exigua decidua excisæ est, et sursum reflexa, ut cavum inter eam et cæteras membranas cerneretur.

- A Decidua pars exigua excisæ.
- B Conceptus pars ubi deest decidua, exadversum scilicet aditum per uteri cervicem ducenti.
- CCC Decidua superficies externa.
- D Decidua reflexa obtegens chorion et amnion, quæ membranæ se protendentes cavum decidua adimplent.
- E Partis superioris placentæ facies externa.

### F I G. IV.

Idem ovum, decidua jam incisione decussatim aperta, angulis quatuor revolutis deciduaque reflexæ portione rotunda cultro sublata et devoluta, nempe ut vascula in superficie externa chorii in conspectum prodirent.

- A, B. Vide fig. III.
- CCCC Facies interna quatuor angulorum in quos decidua cruciali incisione fuerat divisa.
- DDD Decidua reflexa cæteras membranas investiens.
- EE Angulus ad placentæ marginem, ubi lamella interior decidua protenditur supra faciem externam chorii, nomenque decidua reflexa obtinet.
- F Decidua reflexæ portio rotunda, ex facie externa chorii cultro anatomico sublata et devoluta.
- G Chorion cum vasibus hirsutis expositum. Vasa ista decidua reflexæ arcite adhærebant, et eorum nonnulla una cum membrana illa abscissa sunt.

### F I G. V.

Ovum eodem fere tempore abortu separatum, conflans ex chorio solo, cum vasibus et contentis ejus; quippe decidua, vel pars secundarum uterina, in utero remanebat.

- AAA Vasorum hirsutorum rami majores et frequentiores, ex quadam parte superficie externa chorii emergentes, et cum decidua, vel parte uterina, ad placentam conficiendam se commiscentes.
- BB Chorii ea portio quæ postea membrana uniformis et pellucida evadit; vasibus paucioribus, subtilioribus, fluitantibus, quæ in decidua reflexa evanescent, abundat: per eam conspicitur embryo.
- C Vesicula umbilicalis in facie externa amnii per chorion conspecta: filum exalbidum (reliquæ arteriæ et venæ) ab ea ad umbilicum embryonis transfit.

### F I G. VI.

Idem ovum apertum. Membranis anticæ parti insidentibus a placentæ abscissis et reflexis, distincte conspicitur embryo.

- A Vesicula umbilicalis, ex qua
- BB Reliquæ arteriæ et venæ, filo albo similes, ad umbilicum embryonis transfunt. Intestinorum gyri quidam in principio funis umbilicalis includuntur.

## P L A T E XXXIII.

SIX figures of three different abortions.

### F I G. I.

An abortion, of about nine weeks, seen on that side which is membranous. The decidua is torn, and turned somewhat aside, to shew the smooth and opake decidua reflexa.

- AA The rough, external surface of the decidua, which exfoliated from the womb.
- B The outside of a small portion of the placenta, the rest of which was situated on the back-part of this object.
- CCCCC The internal cribiform surface of the decidua, which, in the first months of pregnancy, does not adhere to the membranes which it encloses.
- DDDD The lacerated edge of the decidua which had been continued into the edge EEE of the same membrane.

F The decidua reflexa spread over the outside of the chorion.

GG The angle of reflection at the edge of the placenta, where the inner layer of the decidua is turned over the chorion; much in the same manner as the inner lamella of the pericardium is reflected, to cover the outer surface of the heart.

H The termination of the decidua at the cervix uteri.

### F I G. II.

A vertical section of the same.

AAA The section of the placenta; which, we must suppose, had adhered to the upper and back-part of the womb.

BB The section of the anterior portion of the decidua.

CC The section of the posterior portion of the decidua.

D The termination of the decidua at the cervix uteri.

EE The cavity of the amnion, in which the embryo hangs by a slender navel string, from the inside of the placenta.

F The section of the three membranes, which are not only contiguous, but adhere to one another, viz. the amnion, the chorion and the decidua reflexa.

GG The angle, at the edge of the placenta where the inner layer of the decidua is reflected over the outside of the chorion.

H Here those three membranes are a little separated, to shew their course at the placenta.

### F I G. III.

An abortion of about eight weeks. A small strap of the decidua is cut out, and turned up, to shew the cavity between it and the other membranes.

A - The cut strap of the decidua.

B The part of the conception where there is no decidua; viz. opposite to the passage through the cervix uteri.

CCC The external surface of the decidua.

DD The decidua reflexa covering the chorion and amnion, which project and fill up the cavity of the decidua.

F The outside of the upper part of the placenta.

### F I G. IV.

The same, when the decidua had been opened by a crucial incision, and the four angles had been turned off, and then a round piece of the decidua reflexa dissected off, and turned to one side, to shew the loose vessels on the outside of the chorion.

A, B. See fig. III.

CCCCC The inside of the four angles or flaps into which the decidua was reduced by a crucial incision.

DDD The decidua reflexa, covering the other membranes.

EE The angle, at the edge of the placenta where the interior lamella of the decidua is continued over the outside of the chorion, forming the decidua reflexa.

F A round portion of the decidua reflexa dissected from the outside of the chorion and turned aside.

G The chorion, with its shaggy vessels, laid bare. These vessels adhered firmly to the decidua reflexa, and parts of them were cut off with that membrane.

### F I G. V.

An abortion of the same age, consisting of the chorion only, with its vessels and contents; that is, without the decidua, or uterine part of the secundines.

AAA The larger and more crowded branches of the shaggy vessels which shoot from the external surface of one part of the chorion, to mix with the decidua, or uterine part, to form the placenta.

BB That portion of the chorion which afterwards becomes the uniform transparent membrane. It is covered with fewer and more delicate floating vessels, which lose themselves in the decidua reflexa. The embryo is seen through it.

C The vesicula umbilicalis on the outside of the amnion, seen through the chorion; with a whitish thread, (the remains of an artery and vein) leading from it, towards the navel of the embryo.

### F I G. VI.

The same opened. The membranes, which were at the fore-part, being cut from the placenta, and turned up, the embryo is distinctly seen.

A The vesicula umbilicalis, from which B, the remains of an artery and vein, in the form of a white thread, pass to C, the navel of the embryo, with some turns of the intestines lodged in the beginning of the navel string.

## T A B U L A XXXIV.

### F I G. I.

**O**VUM, scilicet chorion, cum omnibus ejus contentis, quintam, ut licet conjicere, circiter hebdomadam. Literæ, antea usitate, ad dignoscendas partes, minime desiderantur. Maculæ quo maxime fuscæ sunt, sanguinis coagulati reliquias parvas repræsentant. In medio, globi instar, conspicitur amnion, per quod fœtus indistincte appetatur. Ovum ipsum haud paululum mole sua complanatum expassumque fuit, coram pictore in patella dum jacebat.

### F I G. II.

Idem ovum preparatum, magna fatis parte chorii abscissa, amnioque cum fœtu incluso, ut partes circa umbilicum ejus conspicerentur, in latus reflexo, vitri optici ope, ut partes minores magis distincte possent conspici, amplificatum fuit. Vasa hirsuta fluitantia, ex facie externa chorii exentia, per se fatis patent.

**A A** Spatium inter chorion et amnion. Hoc refertum erat gelatina tenera, adeo pellucida ut vix cerni posset; unde arteriæ venæque ramosæ, sanguine rubro impletæ, in facie interna placentæ distincte per eam conspicebantur.

**B** Amnion liquore pellucido colorisque experte, purissima veluti aqua fontana, distendebatur; per quem fœtus partes minores apparebant.

**C** Vesicula umbilicalis humore distensa: neque amnio illa, neque chorio connexa fuit; gelatina autem tenera circumdata, umbilico fœtus per arteriam et venam, quasi per pediculum, adnexa; quibus quidem vasum tanta inter se vicinitas fuit, ut vas unum sanguine rubro impletum, et ramos in vesiculam umbilicalem solam emittens, viderentur. Caput fœtus trunco ejus longius fuit; brachia et crura non nisi per paululum emicuerant; viscera abdominis nondum fuerant vestita; pars eorum magis fusca hepar fuit: fune umbilici nondum orto, fœtus facie internæ chorii et amnii, quæ eo loci contigua erant, medio ab domine, adnectebatur.

### F I G. III.

Ovum integrum, quartæ hebdomadæ, ut licet conjicere. Ovi pars superior, latior et plana, fæcculus fuit, textura tenera, per deciduam solam formatus: huic ad angulos superiores foramen dentatum utrinque fuit, ubi tubas intrasse conspici licet; et ad ovi partem inferiorem portio crassa angustaque ex membranis omnibus contentisque eorum constituit.

### F I G. IV.

Eiusdem ovi, sectione a vertice ad imum ducta aperti, facies interna. Ovum totum adhuc fundi uteri formam triangularem retinebat.

Pars lata superior, decidua faciem internam lœviorem, cribro similem, ostendit; et pars angusta inferior, omnium membranarum sectionem cavumque in conspectu ponit. Fœtus primordia omnino soluta fuerant. Amnion a chorio se juncta fuerat, et in cavo ejus fluitabat. Ex duobus ab eodem centro circulis albis, interior est chorio se juncta; cuius in facie externa stratum spongiosum, cui vasa ex chorio se immittunt, cernitur: circulus albus exterior, ad partem inferiorem, deciduam placentam obtegentem, et ad partem superiorem deciduam reflexam repræsentat.

### F I G. V.

Ovum integrum tertiam circiter hebdomadam.

**A A** Seta in cavum ovi træcta per foramen ad utrumque angulum superiore, quod scilicet tubæ fallopianæ extremitatem esse conspiceret licet. **B B** Eadem setæ per foramen majus exentes ad angulum inferiorem, quod cervici uteri exadversum esse ponimus.

**C** Hydatis, molis admodum exiguae, per deciduam fæse projiciens, et filamenta gracilia ramosa ex superficie sua emittens: chorio esse, vix dubitandum.

### F I G. VI.

Idem ovum, maxima parte parietis anterior excissa.

**A A, B B, C.** Vide fig. V.

Manifestum est deciduam, hocce in ovo, membranam fuisse densam, textura glutinofæ, quæ toti cavo triangulari fundi uteri, tanquam vestimentum, adhaerat; conflatbat etiam tubas in facie ejus interna fuisse terminatas; chorio inter duplicem ejus membranam situm fuisse, vel subtilitatem ejus circundatum; parique pafu cum incremento chorio, procedente uteri gestatione, cavum decidua coardafæ, lamellam ejus interiorem (five deciduam reflexam) distendens, donec tandem, delecto cavo, lamella illa interna faciei interiorei decidua fuisse contigua. Progreffus hic, de quo agitur, mutationis planius intelligitur, si proxime his figuræ inter se conferantur, ordine earum inverso, primo scilicet nonam, deinde octavam, et postremo septimam.

### F I G. VII.

Status ovi (qualem scilicet animo licet concipere) in utero ætate proœctioris, ubi chorio, decidua reflexa obiectum, per plurimum spatium in cavum decidua porrigitur.

**A A** Decidua se juncta, ubi certo temporis progreffu, lamellam externam duplicit membranæ, spongiosum vel notum chorio vulgo dicitæ, confecisset.

**B** In hoc loco, decidua partem placentæ, uterinam distam confecisset.

**C** Amnii cavum.—**D** Cavum, vel spatium, amnion inter et chorio.

**E** Cavum decidua, vel spatium membranam illam inter et decidua reflexam.

**F F** Tube in faciem internam decidua fæse aperientes.

**G** Cervix uteri nullam partem ovi continens.

### F I G. VIII, et IX.

Duæ hæ figuræ, in hoc fere solo ab ultima differunt; nimurum chorii in decidua cavum proœctio eo minor est, quo ovum ætate minus.

## P L A T E XXXIV.

### F I G. I.

**A** Conception, viz. the chorion with all its contents, supposed to be about five weeks. The parts will be understood without letters of reference. Some of the darkest spots represent the little remnants of clotted blood. In the middle the amnion is seen like a round ball, through which the fœtus appears indistinctly. The whole object was considerably flattened and spread out, by its own weight, as it lay in a little dish before the painter.

### F I G. II.

The same conception, prepared by cutting away a considerable part of the chorion, and turning aside the amnion with the enclosed fœtus, that the parts about the navel might be seen. It is considerably magnified, to shew the small parts more distinctly.

The shaggy floating vessels, which shoot from the outer surface of the chorion, require no explanation.

**A A** The space between the chorion and amnion. This was filled with a tender jelly, so transparent as to be almost invisible; whence, the branching arteries and veins, filled with red blood, upon the inside of the placenta, were distinctly seen through it.

**B** The amnion distended with a liquor as transparent and void of colour as the clearest water; through which the minute parts of the fœtus were distinctly seen.

**C** The vesicula umbilicalis, distended with a fluid. It was neither attached to the amnion nor the chorion; surrounded with the tender jelly; connected, as by a pedicle, to the navel of the fœtus by an artery and a vein; which lay so close together, as to appear like one vessel filled with red blood, and dispersing its branches on the vesicula umbilicalis alone.

The head of the fœtus was longer than the trunk: the arms and legs had shot out but a little way: the abdominal viscera were not covered: the darker part of these was the red liver: there being no navel-string, the fœtus was attached at its abdomen to the inside of the amnion and of the chorion, which were contiguous at that place.

### F I G. III.

An entire conception supposed to be in the fourth week. The broad and flat upper part of the object was a bag of a tender texture, formed of the decidua only, with a ragged perforation at each of the two upper angles, where the tubes were supposed to have entered; and the thick and narrow portion, at the lower part of the object, consisted of all the membranes and their contents.

### F I G. IV.

The inside of the same object, laid open by a vertical section. The whole conception retained still the triangular shape of the fundus uteri. The broad upper part shews the smoother and cribiforme internal surface of the decidua; and the narrow part below shews the section and cavity of all the membranes. The rudiments of the fœtus were dissolved. The amnion had separated from, and lay loose in the cavity of the chorion. Of the two, concentric, white circles, the interior is the section of the chorion; upon the outside of which is seen the stratum of spongy substance into which the vessels shoot from the chorion. The outer white circle represents, at its lower part, the decidua covering the placenta; and, at its upper part, the decidua reflexa.

### F I G. V.

A compleat conception, of about three weeks.

**A A** A brittle puffed into the cavity of the conception, through a hole at each of the upper angles, which was supposed to be the termination of the fallopian tube.

**B B** The same bristles coming out through a larger hole at the lower angle, supposed to be opposite to the cervix uteri.

**C** A small hydatid, projecting through the substance of the decidua, which had slender branching filaments shooting from the surface, supposed to be the chorion.

### F I G. VI.

The same conception, after a considerable portion of its fore-part had been cut out.

**A A, B B, C.** See fig. V.

It plainly appears that, the decidua, in this case, was a thick membrane (of a gelatinous texture) which had lined and adhered to the whole triangular cavity of the fundus uteri; that, the tubes terminated on its internal surface; that, the chorion was lodged in its duplicitate, or was surrounded with its substance; and that, in proportion as the chorion would have been extended, in the progress of gestation, it would have encroached upon the cavity of the decidua, stretching its interior lamella (or decidua reflexa) till at length the cavity being obliterated, that interior lamella would have come into contact with the inside of the decidua. This progressive change will be more clearly understood by comparing the three following figures in the inverted order, viz. IX, VIII, and VII.

### F I G. VII.

The more advanced state of a supposed conception in the womb; when the chorion, covered by the decidua reflexa, is stretched a great way out into the cavity of the decidua.

**A A** The section of the decidua, where, in process of time, it would constitute the external lamella of the double membrane which has been commonly named the spongy or false chorion.

**B** Here the decidua constitutes the uterine part of the placenta.

**C** The cavity of the amnion. — **D** The cavity or space between the amnion and chorion.

**E** The cavity of the decidua, or the space between that membrane and the decidua reflexa.

**F F** The tubes, opening upon the inside of the decidua.

**G** The cervix uteri, containing no part of the conception.

### F I G. VIII, and IX.

These two figures differ from the preceding almost in this respect alone, that the projection of the chorion into the cavity of the decidua is less in proportion as the conception is younger.



I. V. Rymondi delin.

TAB. XXXIV. Fig. I. *Conceptus, quinta circiter hebdomade, nempe Chorion cum omnibus suis contentis.* Fig. II. *Idem conceptus, con-*  
*spicillo amplificatus, Chorū parte anteriori exuifsi, et Amnio Embryonem continentem in latus reflexū.* Fig. III. *Conceptus integer, quarte*  
*circiter. Hebdomadis.* Fig. IV. *Partes ejusdem interiores, sectione a vertice ad inam ducta, patefacta.* Fig. V. *Conceptus integer, circa*  
*tertiam. Hebdomadem.* Fig. VI. *Idem, parte anteriori sublati.* Fig. VII. VIII. IX. *Figures quicunque factae Uteri, in gravidis, secundam longi-*  
*tudinem disjecti, ut ejus diversas, in primis graviditatis Hebdomadis, status, qualis, mihi videbatur, innotesceret.*

G. Ponti Sculp.













